CALIFORNIA SCHOOLS

FEBRUARY, 1960

CALIFORNIA SCHOOLS

VOL. XXXI, No. 2
FEBRUARY, 1960

Official Publication Issued Monthly by the California State Department of Education

Entered as second-class matter at the Post Office at Sacramento, California.

ROY E. SIMPSON
Superintendent of Public Instruction

EDITOR
IVAN R. WATERMAN
Chief, Bureau of Textbooks and Publications

EDUCATIONAL PRESS ASSOCIATION OF AMERICA

CONTENTS

	Page
Maintaining a Balanced Educational Program	57
Progress Report of the Master Plan Survey of Public Higher Education	62
Extending the School Year	82
Special Purpose Apportionment of the State School Fund, 1959-60	88
Enrollment in California Public Schools, October 31, 1959	93
Relationships Between Development of Language Skills and Cultural Attitudes	112
Means for Evaluation of Language Learning	117
Departmental Communications	122
For Your Information	124
Conservation	128

THE COVER ILLUSTRATION shows metallurgy students at Cerritos Junior College, Norwalk, polishing metallurgical specimens prior to etching and microscopic examination. The laboratory facilities were developed with the assistance of National Defense Education Act funds.

On December 18, 1959, the State Board of Education and the University of California Regents meeting jointly in Berkeley approved for the State Legislature's consideration an unparalleled Master Plan for Higher Education in California.

The Master Plan was conceived in an atmosphere of candor and trust. It reflects the careful consideration that has been given to the development, expansion and integration of public junior colleges, state colleges, and the University of California. The plan is formal documentation of the goodwill among these three systems of public education, a goodwill which six months ago many believed did not exist.

The plan's strengths are in the contributions of trust each system has made to its fellow systems. These contributions were skillfully elicited by Arthur G. Coons, president of Occidental College, in the weeks of negotiation which produced the Master Plan. In great part Dr. Coons' leadership helped create the atmosphere of candor and trust crucial to accomplishment.

The Master Plan has my unqualified endorsement. For the state colleges, it recognizes that they are reaching maturity. To find their fullest potential in the years ahead, they will need the strength the Master Plan proposes for them. For the junior colleges, it recognizes their unique contributions now, and the magnitude they will gain in the years ahead. Finally, it assures the historic prerogatives of the University of California. It is for these reasons that the Master Plan has my approval.

See report on page 62.

Roy E Simpson

Superintendent of Public Instruction

MAINTAINING A BALANCED EDUCATIONAL PROGRAM[1]

ROY E. SIMPSON, *Superintendent of Public Instruction*

In the troubled times in which we are living nothing is more necessary than to maintain perspective, to know and understand the total purposes of public education, and to plan so that we can meet our obligation to children and to society as a whole. Perhaps there has never been a time in educational history when it was more necessary to maintain a proper balance in curriculum development and in instructional offerings.

We must pause therefore to take a long and careful look at our present programs of instruction from kindergarten through the junior college.

At the state level we have been doing just this in one of the major areas of the curriculum—the social studies. In the fall of 1954, I appointed

[1] Address given at the annual conference on the Direction and Improvement of Instruction and on Child Welfare, Los Angeles, California, November 17, 1959.

a state-wide committee and charged it with the responsibility to review and appraise our existing social studies program, and to make recommendations for changes and improvements that were found to be necessary. I hoped we could achieve better articulation of instruction from level to level, and better program design for the entire scope of public education, kindergarten through grade fourteen.

Doubtless many of you have read accounts in the press about the forthcoming state-wide study of the mathematics program offered by California public schools, kindergarten through junior college. The purpose of this study will be to review present practices in the light of the best research evidence in the field.

We will doubtless receive many suggestions from our legislative friends regarding detailed points of emphasis. Some of these suggestions will reinforce and support the general direction of developments of the recent past and the present; others may indicate a preference for a change of direction.

Public education in our time has been responsive to the acquisition of new knowledge in the same way if not to the same degree as have other aspects of American life. Perhaps educational advances have not been as dramatic or as startling as the breakthrough in the field of science represented by the splitting of the atom, or the more recent achievements with space rockets. Nevertheless, the development in education has paralleled that of science. From much the same sources have come new knowledge, better understanding of the materials with which we work, and new techniques of utilizing this knowledge and understanding.

Our educational growth has not been even and continuous, for we have made many mistakes as we have tried to apply our new knowledge to the curriculum and to teaching activities. Our educational practice, however, has moved forward as a result of our acquisition of more knowledge about the nature of people and the nature of learning itself.

In terms of educational practice, perhaps the closest approach to a breakthrough such as we have seen in science took place in the two decades between 1920 and 1940. During the first decade, many educators started talking about the child-centered school, meaning a school which gave primary attention to the differences in learning ability, in rates of progress, and the relation of interest to learning. This new concept of education differed radically from the older concept that education was a process of surmounting grade level barriers of equal height for all children regardless of ability.

Some enthusiasts went so far as to imply that in a child-centered school a planned and controlled curriculum was not necessary, because natural selection of subject content around developing interests and growing abilities would inevitably lead pupils into contact with basic

content and to mastery of fundamental skills. Professional as well as public rejection of such an extreme viewpoint has been almost universal, but for a while the writings and "drum beatings" of a noisy group of extremists resulted in the viewpoint receiving some favorable consideration. The discovery of individual differences in learners does not of itself have any negative connotation regarding the importance of subject matter. Nor does it negate the importance of exercising a high degree of selectivity in the choice of subject content that will be of the greatest value in educating citizens for useful and efficient participation in our kind of society.

The second of the two breakthrough decades in education, between 1930 and 1940, was even more important. It brought about not only refinement of the meaning of individual differences and elimination of early mistakes of the child-centered approach to instruction, but brought to us much new knowledge about the effect of emotions, attitudes, feelings of personal adequacy, and the like.

With the advent of World War II, however, public attitudes experienced a sharp reversal. Whereas a great national economic catastrophe in 1929 had released the springs of creativity and freedom for experimentation in new approaches, another catastrophic development of the next decade had exactly the opposite effect. The reason is not hard to find. In 1929, the threat was to our internal, primarily economic, security. The solution to this domestic problem seemed to lie in new ways of doing things, because the old ways had failed. In 1941, the threat was external, involving our national survival against foreign enemies. In the latter case the deep-seated fears of our people for survival had the effect of driving us back to the fundamental, tried and true things to which we were accustomed.

A reversal of public support for innovations in educational practice took place during this decade. Concern over national defense and questions of cultural survival and the like, was evident as a new period of education was ushered in. We are still essentially in this period—one of review, assessment, and appraisal, in which the newer materials of learning are being tested against the purposes for which our citizens believe the public schools exist in our culture.

In taking the time for this brief thumbnail sketch of educational history in our times, it is my purpose to set our present situation in a framework of progress. One of the most dangerous things that professional educators can do, in my opinion, is to interpret every current challenge to education as a threat of retrogression. Certainly education is not "going back" to anything, if by "going back" we mean returning to the use of obsolete curriculum patterns, teaching materials, methods, and aims and purposes. These are obviously neither appropriate nor adequate to meet the needs of our modern world.

Society's demands are becoming greater each day. These demands are produced by the fact that human knowledge is increasing at an almost astronomical rate and this knowledge is being utilized to provide improved living and working conditions in our homes, on our farms, in our factories, and in our offices. The result is that the demand for competent, trained people is increasing with dizzying speed. Our educational institutions are the only agencies that can meet this demand as it arises.

The pressure upon public education is so great because the stakes are so high. As never before, education becomes the principal weapon to protect our nation and our people in the race for survival. Some might say that the pendulum started to swing back with the advent of World War II. I prefer to say that because of increasing awareness of the tremendous task that public education must perform, we have entered a new phase in which everything we do must be rigidly tested, appraised, and then accepted or discarded in terms of how well it meets the acid test of our nation's need.

One means of making this appraisal would be to determine how well students achieve the following:

1. Mastery of the fundamentals and other important areas of learning
2. Facility as citizens, sound in mind and body
3. Full development of special talents

Another means would be to determine the extent to which the public schools are a sound investment, and are administered efficiently.

These criteria provide for full consideration of the goals which we embraced so sincerely in the 1920's and 1930's, and of the fundamentals which are the basis of civilization.

There is no dichotomy between the teaching of fundamentals and the training of good citizens, sound in mind and body. Both are rudiments of an instructional program that the vast majority of our people expect from their public schools. People also expect the schools to provide opportunity for students to discover and develop their special talents. Briefly stated, our people expect the schools to maintain a balanced educational program.

The State Department of Education is firmly committed to this point of view. It is firmly opposed to those who would pare from the educational program offered by California public schools everything except the fundamental academic subjects.

The 3 R's and science are not sufficient education for today's young citizens. They need to understand the complex world in which they live. They must recognize the interdependence of individuals on the shrinking globe. And they must know, understand, and appreciate the democratic philosophy of the worth of the individual. The common

experience of public schooling, and the understanding of differences in individuals are important byproducts of the more formal instruction. All our citizens must be offered the same basic educational opportunities. We must also recognize in our school program basic differences in needs among our students; differences in their backgrounds; and differences in their career plans. Programs that contain the provisions required for all these purposes can and must be developed and maintained by the public schools.

We must make this fact known to the public, so that the citizens of our school districts will be convinced of the worth of the programs offered by the public schools.

We must have programs which contain the instruction necessary to meet our goals, and we must give proper emphasis to each of the components of such instruction.

Here is the crucial point: No California public school has ever had a program without the fundamentals. Some California public schools, however, have not emphasized the fundamentals, and as a result they have certainly weakened the public's support of the schools. The emphasis in the balanced program must be on the fundamentals. They cannot be third or fourth in the scale of objectives of the public schools —elementary or secondary, junior college, or state college. They must be first.

As I have noted, the schools have come a long way from the days when the teaching of fundamentals took precedence over all else. In this respect, schools do a better job today than in the past, and students are better students because of the change. But students still go to school primarily to acquire formal education for the years ahead.

At the end of 12 years of public schooling, the knowledge that students will have acquired of reading, writing, arithmetic, and other fundamentals will be of immediate importance. Their success in pursuits of their choosing and their mental well-being will be directly linked to their knowledge of the fundamentals and their skill in using the fundamentals.

All these points add up to one conclusion—the fundamentals must receive first emphasis in the instructional program, and must be emphasized when the program is presented to parents and other citizens. Discussions of other facets of our instructional program must proceed from recognition of the fact that the fundamentals are indeed the foundation of the instructional program.

2—10984

PROGRESS REPORT OF THE MASTER PLAN SURVEY OF PUBLIC HIGHER EDUCATION

As reported in a previous issue of *California Schools*,[1] the Regents of the University of California and the State Board of Education met jointly at two historic meetings during the Spring of 1959, to discuss problems of co-ordination in public higher education. At the second meeting, on April 15, 1959, the governing boards agreed that the Liaison Committee would launch a study for the purpose of developing a master plan for public higher education, as requested by Assembly Concurrent Resolution 88, and would report its findings to the two governing boards and to the Legislature by the beginning of the 1960 budget session of the Legislature.

Subsequently, the Master Plan Survey has been undertaken in conformance with the joint action of the two boards. On June 3, 1959, the Liaison Committee of the Regents of the University of California and the State Board of Education adopted a plan for the organization of the Master Plan Survey and the areas or problems to be studied. Shortly thereafter the Master Plan Survey team was organized to conduct the survey, with Arthur G. Coons, President of Occidental College, appointed as its chairman. Six technical committees were organized to undertake studies and report findings in various technical areas of the survey. The Joint Advisory Committee, described in the previous article of *California Schools*, continued its assignment of attempting to resolve questions concerning differentiation of function among the three segments of public higher education. Also, representatives from the Assembly Education Committee, the Senate Education Committee, the Department of Finance, and the Legislative Analyst were invited to sit in an advisory capacity with the Liaison Committee during its deliberations pertaining to the survey.

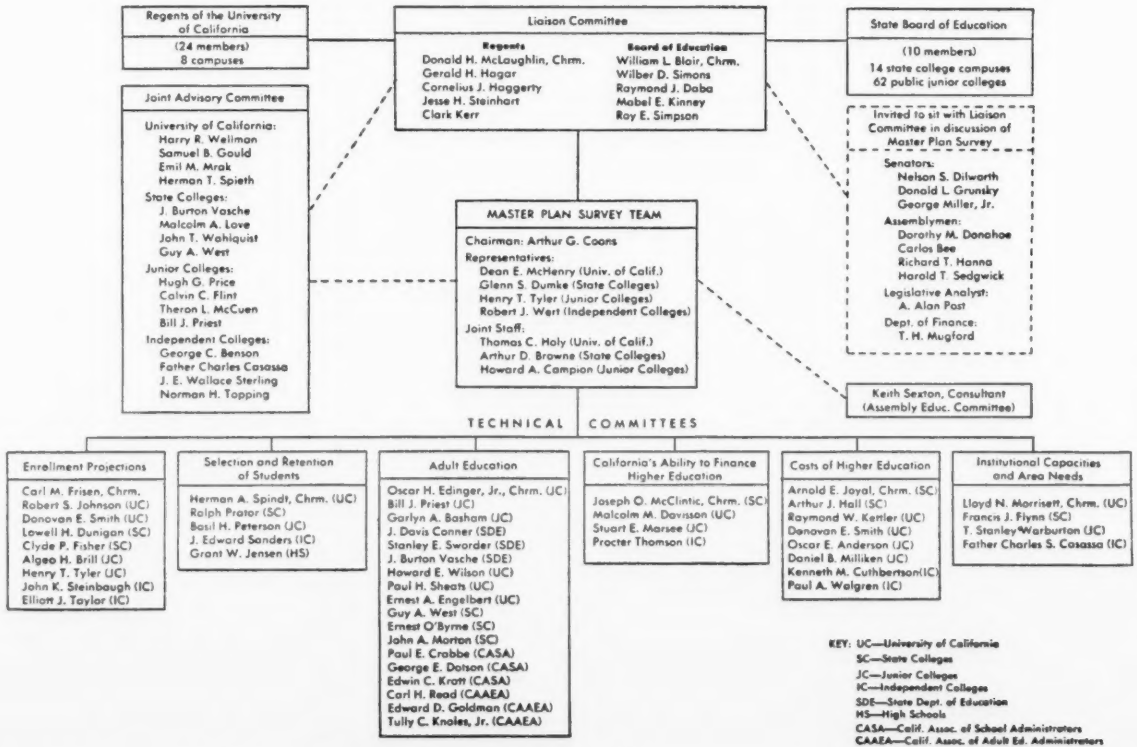
The complete organization and members of the various groups are shown in Figure 1.

The Master Plan Survey was undertaken and consummated during the last six months of 1959. The survey team usually met for several days on alternate weeks, the technical committees convened frequently as called by their chairmen, and the Liaison Committee held monthly meetings to review the developments and react to the results of the Master Plan Survey. Finally, in a series of meetings on December 7, 8, 9, and 17, the Liaison Committee received, and accepted with very few modifications, the proposals submitted by the Master Plan Survey

[1] Joint Staff of the Liaison Committee: Arthur D. Browne and T. C. Holy, "Co-ordination of Public Higher Education in California: A Report of the First Joint Meeting of the Regents and the State Board of Education." *California Schools*, XXX (May, 1959) 186-92.

FIGURE 1

ORGANIZATION FOR THE MASTER PLAN SURVEY
OF HIGHER EDUCATION IN CALIFORNIA*



* Established by the Liaison Committee in compliance with Assembly Concurrent Resolution No 88, 1959 Legislature.

August 6, 1959

team. These proposals were then presented to the two governing boards at their third joint meeting, held on December 18, 1959, and chaired by Governor Edmund G. Brown.

It is anticipated that these recommendations will be submitted to the Legislature in a special session to be called by the Governor in March, 1960. A summary report of the survey will be published at that time for general distribution. Also, technical committee reports will be made available as supporting documentation for various areas of the survey included in the survey report.

The following list of Master Plan Survey recommendations was accepted in principle by the Regents of the University of California and the State Board of Education on December 18, 1959.

TO THE REGENTS OF THE UNIVERSITY OF CALIFORNIA AND THE STATE BOARD OF EDUCATION

Your Liaison Committee reports that, pursuant to the provisions of Assembly Concurrent Resolution No. 88, adopted by the Legislature in 1959, and pursuant to action taken by the two Boards in joint session on April 15, 1959, it has directed a basic study and the preparation of a Master Plan for Higher Education in the State of California to meet the needs of the State during the next ten years and thereafter; and

As a result of said Study recommends as follows:

STRUCTURE, FUNCTION AND COORDINATION IN HIGHER EDUCATION IN CALIFORNIA

It is recommended that:

1. An amendment be proposed to add a new section to Article IX of the State Constitution providing that:

   Public higher education shall consist of the junior colleges, the State College System, and the University of California. Each shall strive for excellence in its sphere, as assigned in this section.

2. The junior colleges shall be governed by local boards selected for the purpose from each district maintaining one or more junior colleges. The State Board of Education shall prescribe minimum standards for the formation and operation of junior colleges, and shall exercise general supervision over said junior colleges, as prescribed by law. Said public junior colleges shall offer instruction through but not beyond the 14th grade level including but not limited to, one or more of the following: (a) standard collegiate courses for transfer to higher institutions, (b) vocational-technical fields leading to employment, and (c) general, or liberal arts courses. Studies in these fields may lead to the Associate in Arts or

Associate in Science degree. Nothing in this section shall be construed as altering the status of the junior college as part of the Public School System as defined elsewhere in the Constitution.

3. The State College System:
   (a) shall constitute a public trust, to be administered by a body corporate known as "The Trustees of the State College System of California" with number, term of appointment and powers closely paralleling those of The Regents.
   (b) The board shall consist of 5 ex-officio members: the Governor, the Lieutenant Governor, the Speaker of the Assembly, the Superintendent of Public Instruction, and the chief executive officer of the State College System; and sixteen appointive members appointed by the Governor for terms of sixteen years. The chief executive officer of the State College System shall also sit with The Regents in an advisory capacity, and the President of the University of California shall sit with the Trustees in an advisory capacity. The members of the State Board of Education shall serve ex-officio as first Trustees, being replaced by regular appointees at the expiration of their respective terms.
   (c) The state colleges shall have as their primary function the provision of instruction in the liberal arts and sciences and in professions and applied fields which require more than two years of collegiate education, and teacher education, both for undergraduate students and graduate students through the master's degree. The doctoral degree may be awarded jointly with the University of California, as hereinafter provided. Faculty research, using facilities provided for and consistent with the primary function of the state colleges, is authorized.
4. The University of California shall be governed by The Regents as provided in Section 9 of this Article. The University shall provide instruction in the liberal arts and sciences, and in the professions, including teacher education, and shall have exclusive jurisdiction over training for the professions including but not by way of limitation, dentistry, law, medicine, veterinary medicine and graduate architecture. The University shall have the sole authority in public higher education to award the doctor's degree in all fields of learning, *except that* it may agree with the state colleges to award joint doctor's degrees in selected fields. The University shall be the primary state-supported academic agency for research, and The Regents shall make reasonable provision for the use of its library and research facilities by qualified members of the faculties of other higher educational institutions, public and private.

5. An advisory body, the Coordinating Council for Higher Education:

(a) shall consist of twelve members, three representatives each from the University, the State College System, the junior colleges, and the independent colleges and universities. The University and the State College System each shall be represented by its chief executive officer and two board members appointed by the boards. The junior colleges shall be represented by (1) a member of the State Board of Education or its Chief Executive Officer, (2) a representative of the local governing boards, and (3) a representative of the local junior college administrators. The independent colleges and universities shall be represented as determined by agreement of the chief executive officers of the University and the State College System, in consultation with the association or associations of private higher educational institutions. All votes shall be recorded, but effective action shall require an affirmative vote of four of the six University and state college representatives; except that on junior college matters the junior college representatives shall have effective votes; and on the appointment and removal of a director of the Council all twelve shall be effective.

(b) A director of the staff for the Coordinating Council shall be appointed by a vote of eight of the twelve Council members, and may be removed by a vote of eight members of the Council. He shall appoint such staff as the Council authorizes.

(c) The Coordinating Council shall have the following functions, advisory to the governing boards and appropriate State officials:

(1) Review of the annual budget and capital outlay requests of the University and the State College System, and presentation to the Governor of comments on the general level of support sought.

(2) Interpretation of the functional differentiation among the publicly supported institutions provided in this section, and in accordance with the primary functions for each system as set forth above, advise The Regents and The Trustees on programs appropriate to each system.

(3) Development of plans for the orderly growth of higher education and making of recommendations to the governing boards on the need for and location of new facilities and programs.

(d) The Council shall have power to require the public institutions of higher education to submit data on costs, selection and

retention of students, enrollments, capacities, and other matters pertinent to effective planning and coordination.

SELECTION AND RETENTION OF STUDENTS

A. Validity of Entrance Requirements

It is recommended that:

1. The junior colleges, state colleges, and University make statistical studies of their entrance requirements, and report annually, in standard form, to the coordinating agency on validity judged by: (a) scholastic success, (b) persistence, (c) rate of dismissal, and (d) scores on standard tests.
2. Each public segment report annually to the coordinating agency on its grading standards, providing data on such matters as:
   a. Distribution of undergraduate grades awarded (proportion of each grade given for each institution, department, and by lower and upper division).
   b. Its grading differential with other institutions or segments as computed from the records made by transfers.

B. Admissions Policies and Procedures

It is recommended that:

1. In order to raise materially standards for admission to the lower division, the state colleges select first-time freshmen from the top [2] one-third (33⅓ per cent) and the University from the top one-eighth (12½ per cent) of all graduates of public high schools in California, with:
   a. Continuation of existing special programs and curricula involving exceptions to this rule subject to approval by the respective Boards, and these to be kept to a minimum, and those that are continued to be reported annually to the coordinating agency, any new special programs and curricula involving such exceptions to be approved by the coordinating agency.
   b. Graduates of private and out-of-state secondary schools held to equivalent levels.
2. Implementation of Recommendation Number 1 to be left to the two systems with these provisions:
   a. Each to have the new requirements in force for students admitted for Fall, 1962.
   b. Inasmuch as the Survey Team favors acceptance in both systems of a requirement that all, or almost all, of the recommending units for admission shall be in college preparatory

[2] As defined by criteria established by each system for itself.

courses, that the application of such a requirement be carefully studied during 1960, and this principle be applied as fully as possible throughout both systems.

3. For both the state colleges and the University, freshman admissions through special procedures outside the basic requirements of recommending units of high school work and/or aptitude tests (such as specials and exceptions to the rules) be limited to 2 per cent of all freshman admissions in each system for a given year. Furthermore that all "limited" students be required to meet regular admission standards.[3]

4. Junior college functions now carried by state colleges and nondegree lower division programs at any state college or University campus (other than extension) be subject to the following rule:

   The equivalent of junior college out-of-district tuition be charged beginning in Fall, 1960, against the counties of residence of all lower division students who are ineligible to admission by regular standards, and the funds collected paid to the General Fund of the State.

   Furthermore, that such junior college functions now carried by state colleges at state expense be terminated not later than July 1, 1964, all admittees thereafter being required to meet standard entrance requirements.

5. The state colleges and the University require a minimum of at least 56 units of acceptable advanced standing credit before considering the admission of applicants ineligible to admission as freshmen because of inadequate grades in high school, except for curricula that require earlier transfer,[4] and except also that each state college and campus of the University, through special procedures developed by each, be permitted to accept for earlier transfer not more than 2 per cent of all students who make application for advanced standing in any year.

6. Undergraduate applicants to the state colleges and the University who are legally resident in other states be required to meet higher entrance requirements than are required of residents of California, such out-of-state applicants for all public segments to stand in the upper half of those ordinarily eligible. Furthermore, that there be developed and applied a common definition of legal residence for these public segments.

---

[3] The state colleges are now in the process of changing rules to require this.

[4] Both systems have already adopted 60 unit rules for such transfer students, but each left a way to bypass it. The state colleges allow admission on 24 units with "B" average; the University, on thirty or more with 2.4 grade-point average and a satisfactory score on the Scholastic Aptitude Test.

7. A study of the transfer procedures to both the University and the state colleges be undertaken through the coordinating agency during 1960 with the view of tightening them. Evidence available to the Master Plan Survey Team indicates the need for such action.
8. A continuing committee on selection, admission, and retention as a part of the coordinating agency be established, to make further studies in these fields (see Recommendations A1 and A2), and to report annually to the appropriate agencies and persons on:
   a. Transfer procedures as indicated in 7 above.
   b. State college and University procedures in admission to the graduate division.
   c. The desirability of differing standards of admission for the varying programs within each segment of publicly supported institutions.
9. Private institutions of higher education in California in the approaching period of heavy enrollments strive for increased excellence by adopting rigorous admission and retention standards.

C. Retention

It is recommended that:

1. Each segment strive for greater uniformity in policy and practices on probation and dismissal; that among segments where the programs are comparable, an effort be made to secure uniformity in policy and practices on probation and dismissal; and that each segment report annually full retention statistics to the coordinating agency.

DISTRIBUTION OF LOWER DIVISION STUDENTS AMONG THE PUBLICLY SUPPORTED SEGMENTS OF HIGHER EDUCATION

It is believed that an appreciable number of lower division students—probably 50,000 of those who, according to estimates, will be in the state colleges and the University by 1975—should be accommodated in the junior colleges. To that end

It is recommended that:

1. In order to implement more fully the action of The Regents of the University of California and the State Board of Education in 1955 that "the University of California emphasize policies leading to the reduction of lower division enrollments in relation to those of the upper and graduate divisions, and that the state colleges pursue policies which will have a similar effect," the percentage of undergraduates in the lower division of both the state colleges

and the University be gradually decreased ten percentage points below that existing in 1960 (estimated to be 51 per cent in both segments) by 1975. It is further recommended that the determination of the means by which this recommendation can best be carried out, be the responsibility of the governing boards.

(It is estimated that the foregoing recommendation would result in the transfer of some 40,000 lower division students to the junior colleges by 1975. It is expected that the recommendation to select state college students from the upper 33⅓ per cent of all public high school graduates and the University from the upper 12½ per cent, together with the recommendation that all "limited" students be required to meet regular admission requirements, will make up the other 10,000.)

INSTITUTIONAL CAPACITIES AND AREA NEEDS

A. Utilization of Physical Plants

It is recommended that:

1. The standard utilization of classrooms in the junior colleges, state colleges, and the University of California be at the maximum practicable levels, but in no case shall average less than 30 scheduled hours per week, with class enrollments after the first month of the term averaging 60 per cent of room capacity.
2. The standard room utilization of teaching laboratories in the junior colleges, the state colleges, and the University of California be at the maximum practicable levels, but in no case shall average less than 20 scheduled hours per week, with class enrollments after the first month of the term averaging 80 per cent of room capacity.
3. In determining the need for instructional facilities in the junior colleges, state colleges, and campuses of the University of California, these factors be taken into account:
   a. The above recommended standards of utilization.
   b. The space standards as found in Tables 33, 34, and 36 of *A Restudy of the Needs of California in Higher Education* (with such modifications as changes in the present differentiation of functions among the public segments may justify).
   c. The number of FTE students used in projecting building requirements be limited to those to be instructed in the day program, that is, from 8:00 a.m. to 5:00 p.m.
4. In the scheduling of classes greater use be made of the late afternoon and evening hours and when possible on Saturday, thereby making the achievement of the above utilization standards easier.

5. The scheduling of instructional facilities be centrally controlled on each campus with such exceptions as may be approved by the appropriate governing board. (Examples of exceptions are the physical facilities for medicine, law and other areas where the facilities are designed for highly specialized uses.)
6. The coordinating agency (or a continuing committee on plant problems which it might create) undertake without delay the following studies:
   a. A complete study of the current utilization in the junior colleges, state colleges, and the University of California [no such study has been made since 1953-54] for the specific purpose of making such modification in the above recommended standards of utilization as are justified by the findings.
   b. The possible economic and educational gains that might be effected by the adoption of an articulated calendar for all segments of public education in California.
7. Space provisions for health services be increased to allow for infirmary care on state college and University campuses where dormitories are provided.
8. Inasmuch as the space standards found in *A Restudy of the Needs of California in Higher Education*, in Tables 33, 34, and 36, were based on the then existing functions of the state colleges and the University, such standards be modified where agreed-upon changes in functions require different space allocations.
9. In order to provide calendar arrangements that will both fit the public-school year and permit fuller use of the State's higher education physical facilities, it is recommended that:
   a. Every public higher education institution and private institutions, as able, offer academic programs in the summer months of unit value equivalent to one-fourth, one-half or three-fourths of a semester.
   b. State funds be provided for the state colleges and the University of California to offer during the full summer period academic programs on one or more of the patterns indicated in (a) above for regular degree and credential candidates who have met basic admission requirements.
   c. The coordinating agency (or a continuing committee which it might create) study during 1960 the relative merits of three-semester and four-quarter plans for year-round use of the physical plants of both public and private institutions, and on the basis of that study recommend a calendar for higher education in California.

B. Enrollment Limitations and Projected Plant Needs

It is recommended that:

1. With respect to the establishment of new state colleges and campuses of the University, the governing boards reaffirm their action taken in joint session on April 15, 1959, to the effect that

> "No new State Colleges or campuses of the University, other than those already approved, shall be established until adequate Junior College facilities have been provided, the determination of adequacy to be based on studies made under the direction of the Liaison Committee of the State Board of Education and The Regents of the University of California;"

with the further provision that the new state colleges and campuses of the University established by action of the Legislature in 1957, and by action of The Regents, also in 1957, be limited to upper division and graduate work until such time as adequate junior college opportunities are provided for the primary area served by these institutions.

2. That the following full-time enrollment ranges be observed for existing institutions, for those authorized but not yet established, and for those later established:

Type of institution	*Minimum* [1]	*Optimum*	*Maximum*
Junior Colleges	400	3,500	6,000 [2]
State Colleges:			
a) In densely populated areas in metropolitan centers	5,000	10,000	20,000
b) Outside metropolitan centers	3,000	8,000	12,000
University of California Campuses [3]	5,000	12,500	27,500

[1] These are to be attained within 7 to 10 years after students are first admitted.
[2] This maximum might be exceeded in densely populated areas in metropolitan centers.
[3] The minimum figure for the University assumes graduate work in basic disciplines and one or more professional schools.

3. That the State give encouragement to making junior college facilities available for the school districts not now adequately served either through the establishment of new junior colleges or by making them a part of districts now served by junior colleges.

Evidence at hand indicates that there is need for new junior colleges in the school districts listed on the next page.[5]

Note: Your Committee has received, but taken no action on, the following recommendation of its Master Plan Survey team:

"In accordance with Principle 5 of *A Study of the Need for Additional Centers of Public Higher Education in California* as approved by both the

[5] Although districts are arranged in descending order on the projected 1970 full-time enrollment, it is not intended to indicate urgency of need in this same order.

School districts to be included	*County*	*1970 Full-time enrollment* [1]
Whittier	Los Angeles	4,900
Alhambra, El Monte, Montebello	Los Angeles	4,600
Hayward, San Leandro, Washington Union High School Districts	Alameda	4,300
San Diego City–new campus	San Diego	4,000
College of San Mateo–San Bruno Campus	San Mateo	2,000
Sequoia and Pescadero	San Mateo	2,000
Sweetwater-Coronado	San Diego	2,000
Foothill College–new campus	Santa Clara	1,800
Oxnard, Moorpark, Simi, Santa Paula, Fillmore	Ventura	1,800
Grossmont–Mountain Empire	San Diego	1,750
Anaheim	Orange	1,500
Campbell, Live Oak, Santa Clara	Santa Clara	1,500
City of Los Angeles–West Los Angeles Campus	Los Angeles	1,500
County areas	Merced-Madera	1,500
Berkeley, Albany, and Emeryville	Alameda	1,350
Burbank	Los Angeles	1,300
Antioch–new campus	Contra Costa	1,000
East Kern and Inyo County area	Kern	970
County unit	San Luis Obispo	930
Moraga–new campus	Contra Costa	500
Victor Valley	San Bernardino	500
Barstow	San Bernardino	380
Total–22 colleges		42,080

[1] Full-time enrollments for 1975 are now being developed for each of these areas.

State Board of Education and The Regents of the University of California, and which states, 'in order that a possible new institution may serve the greatest number of eligible students, it should be placed near the center of the population served by it,' the Stanislaus County State College, authorized by the 1957 Legislature and with a 1975 estimated enrollment of 2,500, be located in the vicinity of Salida [it is estimated that the potential state college enrollment in this vicinity in 1975 is some 1,100 more than if located in the Turlock area]; and that the state college in the North Bay Counties, likewise authorized by the 1957 Legislature and with an estimated 1975 enrollment of 2,350, be located in the vicinity of Petaluma."

4. New state colleges in addition to those already authorized be established and in operation *by 1965* in these areas and in descending order of estimated enrollment potential:

Approximate location	*Estimated 1975 full-time enrollment potential*
a) In the vicinity of the Los Angeles International Airport	19,900
b) In the San Bernardino-Riverside vicinity (vicinity of Rialto)	12,800

Although it is believed that these two institutions should be master planned for an ultimate capacity of 20,000, the Survey Team recommends that the 1975 enrollment be held to 10,000 and 8,000, respectively.

5. In 1965 and again in 1970, if applicable, and before considering the need for new state colleges in any other areas of the State, careful studies be made by the coordinating agency of the following State Economic Areas to determine the actual need then existing for new state colleges:

SEA-F	Los Angeles-Orange County, Griffiith Park-Glendale vicinity
SEA-A	San Francisco-Oakland Metropolitan Area, vicinity of Redwood City
SEA-A	San Francisco-Oakland Metropolitan Area, Contra Costa County
SEA-K	Bakersfield Metropolitan Area, Kern County
SEA-7	South Coastal Area, Ventura

6. The three new campuses approved by The Regents in 1957—(a) San Diego-La Jolla area, (b) Southeast Los Angeles-Orange County area, and, (c) the South Central Coastal area (Santa Clara, San Mateo, Santa Cruz, San Benito, and Monterey counties) be completed without delay and in any event construction to be started not later than *1962.*

   It is further recommended that these three campuses be planned for 1975 enrollments as follows:

San Diego-La Jolla	7,500
Southeast Los Angeles-Orange County	12,500
South Central Coast	10,000

7. Inasmuch as the estimated University enrollment potential of the San Francisco-Oakland area, which includes the Berkeley Campus of the University, is 46,550 in 1975 (as compared with a maximum enrollment of 27,500 for the Berkeley Campus as recommended for a University campus in B2), the coordinating agency undertake appropriate studies as how best to accommodate the difference between these figures (approximately 19,000), such steps to include careful study of these possibilities:
   a. Diversion of some of these potential students particularly to the Davis campus and the new South Central Coast campus.
   b. The accommodation of the remaining part of the difference (i.e., 19,000 less the impact of (a.) above, through the establishment of branch installations from existing campuses in specialized fields of study such as instruction in science at Livermore. (These would be similar to the off-campus centers for teacher education now operated by certain of the state colleges.)
8. In 1965 and again where applicable in 1970, and before considering the need for new University facilities in any other areas of the State, careful studies be made by the coordinating agency on the need for additional University facilities in the San Joaquin Valley and the Los Angeles area. In the latter area special consideration should be given as to how the difference between the 1975 estimates of potential University enrollment of 53,450 and the 27,500 maximum of the

UCLA Campus (some 26,000 students) can best be accommodated. Such consideration should include the following:

a. To what extent will this difference be cared for by the new Southeast Los Angeles-Orange County campus, and to what extent could these potential students be diverted to the La Jolla, Riverside and Santa Barbara campuses.

b. Will there be a need for the establishment of branch installations in specialized fields of study from existing campuses in this area similar to that included in Recommendation 8b above.

9. Because the University, among the publicly supported institutions in California, has the sole responsibility for the preparation for professions such as Architecture, Dentistry, Law, Librarianship (graduate), Medicine, Optometry, Pharmacy, Public Health, and Veterinary Medicine, periodic studies be made of the relation of supply to demand, particularly in fields where there seem likely to be shortages, such as Medicine and Pharmacy, for the purpose of determining what steps the University should take to meet its responsibilities in these professional fields.

C. Faculty Supply and Demand

It is recommended that:

1. Much greater effort be made to divert a greater proportion of college graduates into graduate training preparatory to careers in college and university teaching. This diversion can best be accomplished by a concerted effort on the part of adequately staffed and supported counseling and guidance services at all levels of education, and with the full cooperation of all college and university faculty members.

2. More funds must be secured to provide financial assistance to those in graduate training. The high attrition rate in graduate programs is, in large part at least, due to financial difficulty; and these withdrawals constitute not only a loss to the potential faculty supply, but an economic waste to the State. Provision of fellowship and loan funds for graduate students is undoubtedly one of the best ways of accomplishing this.

3. Greatly increased salaries and expanded "fringe benefits," such as health and group life insurance, leaves, and travel funds to attend professional meetings, housing, parking and moving expenses, be provided for faculty members in order to make college and university teaching attractive as compared with business and industry. (As an example of the wide differences, of 44 persons awarded Ph.D.'s in shortage fields by the University of California in 1959, 31 accepted positions in industry at an average salary of

$9,884 and 13 went into college teaching at an average salary of $6,075.)

4. Greater use be made of California-trained doctor's degree holders, especially in the shortage years immediately ahead.

   For the three-year period 1955-1958 only 53 per cent of those so trained who enter teaching, did so in California. Evidence indicates that those leaving California do not do so by choice. (E.g., of 44 doctor's degree holders recently placed in college and university teaching outside California by the Teacher Placement Service of the University of California at Berkeley, 87 per cent had stated a preference for a position in California.)

5. Individual faculty members and their institutions jointly assume responsibility for both the initiative and opportunity for the faculty in-service preparation and self-improvement, so essential for the growth and development of the institutions.

6. Strengthening of the master's degree programs in all institutions offering such programs be undertaken by these institutions so that the holders of this degree may be more effective additions to the faculty of colleges, universities, and junior colleges.

   (This is of particular importance to the junior colleges because the highest degree held by 64.7 per cent of those newly appointed in the years 1957-58 and 1958-59 was the master's degree. Although all institutions in the State should cooperate in this effort, the lead should be taken by the state colleges and the University of California because of the high proportion of all such degrees they award.)

7. Reorientation of present doctoral programs offered by California institutions be undertaken to insure that those receiving the degree and planning to enter college and university teaching possess the qualities not only of scholars, but of scholar-teachers. Because the University of California awarded 54.6 per cent of the doctorates given by California institutions for the period 1952-53–1955-56, it has a particular responsibility for the implementing of this recommendation.

8. Because of the continual change in faculty demand and supply, the coordinating agency annually collect pertinent data from all segments of higher education in the State and thereby make possible the testing of the assumptions underlying this report.

   (The 1958 report entitled, *A Study of Faculty Demand and Supply in California Education 1957-1970* contains a recommendation, approved by both Boards, for its re-examination in 1960. A

similar procedure should be followed with respect to this analysis.)

RECOMMENDATIONS ON THE JUNIOR COLLEGES

It is recommended that:

1. Procedures be devised to assure that all funds allocated to and for junior colleges for current expense or for capital outlay by the State be expended only for junior college purposes, and further that the law be clarified to require that all funds received from county junior college tuition funds for use of buildings and equipment be expended solely for junior college purposes.

2. In view of the added local financial obligations, for both current expenses and capital outlay which will result from the Master Plan Survey recommendations designed to divert to the junior colleges some 50,000 lower division students from the 1975 estimates for the state colleges and the University of California and the attendant savings to the State resulting therefrom, these actions be taken:

   a. Procedures and methods be devised and adopted by the Legislature that will increase the proportion of total current support paid to the junior colleges from the State School Fund (augmented for this purpose) from the approximately 30 per cent now in effect to approximately 45 per cent, to be achieved not later than 1975.

   b. A continuing program be devised and adopted by the Legislature that would distribute construction funds either through grants or loans or both, for capital outlay purposes annually to junior colleges as determined by growth, this program being for the purpose of assisting junior colleges to meet the facility needs of projected enrollments and of the students to be diverted to the junior colleges.

3. It is recommended that all the territory of the State not now included within districts operating junior colleges be brought into junior college districts as rapidly as possible so that all parts of the State can share in the operation, control and support of junior colleges. It is further recommended that pending the achievement of this objective, means be devised to require areas that are not a part of a district operating a junior college to contribute to the support of junior college education at a rate or level that is more consistent with the contributions to junior college support presently made by areas included in districts that maintain junior colleges.

STUDENT FEES

For the state colleges and the University of California it is recommended that:

1. The two governing boards reaffirm the long established principle that state colleges and the University of California shall be tuition free to all residents of the State.

   (The distinction between tuition and fees is *tuition* is defined as student charges for teaching expense, whereas *fees* are for charges to the students for services not directly related to instruction, such as health, counseling other than that directly related to the students' educational program, and placement services, housing, recreation, and the like.)

2. Students who are residents of other states pay as follows:
   a. All students except those exempt by law pay tuition sufficient to cover not less than the State's contribution to the average teaching expense per student as defined by the Master Plan Survey Team's Technical Committee on Costs of Higher Education in the institution or system as follows:

      "Teaching expense is defined to include the cost of the salaries of the instructors involved in teaching for the proportion of their time which is concerned with instruction plus the clerical salaries, supplies, equipment, and organized activities related to teaching."

   b. Other fees for services not directly related to instruction.

3. Each system devise a fee structure and collect sufficient revenues to cover such operating costs as those for laboratory fees, health, intercollegiate athletics, student activities, and other services incidental to but not directly related to instruction.

4. The operation of all such ancillary services for students as housing, feeding and parking be self-supporting. Taxpayers' money should not be used to subsidize, openly or covertly, the operation of such services. Because of the various methods which are used to finance construction of auxiliary enterprises such as residence halls and dormitories, it is impossible to state in general which portions of amortization and interest payments are properly chargeable to operating expense. Consequently, it is recommended further that the governing boards determine which of such costs are appropriate charges to operating expense and include as much as possible of those with other operating expenses of such ancillary services.

5. Additional provisions be made for student aid and loans, particularly as fees and nonresident tuition increase.

6. Periodically the governing boards recompute their per-student teaching expense and set nonresident tuition accordingly. Periodi-

cally they recompute the cost of operation of services such as feeding, housing, and parking, and set fees for such services accordingly.

7. Each institution retain moneys collected from nonresident tuition.
8. All the above policies when approved by the two governing boards be applicable immediately to the state colleges and the University of California, and that they be applied to the junior colleges as a matter of State policy and when applicable.

CALIFORNIA STATE SCHOLARSHIP PROGRAM

The operation of the California State Scholarship program created by act of the Legislature in 1955 has fully demonstrated a satisfactory means of affording the youth of California with greater freedom to attend the institution which can best serve their need regardless of tuition and fees. This experience has resulted in substantial net savings to the taxpayers in capital investment, in instructional facilities and operating costs. This program has also encouraged independent institutions to expand their enrollment and facilities and thus absorb a large proportion of the student's educational cost without the above-mentioned burdens upon the taxpayer.

In view of the successful experience of other states with similar programs, in view of the expected growth of population in higher education in California, and in view of the principle expressed by the Technical Committee on the Selection and Retention of Students that the most able students should have the greatest freedom of choice, *it is recommended that:*

1. The present scholarship program be expanded to include additional scholarships to provide for the rapidly increasing number of qualified applicants.
2. The amount of the scholarship be increased to compensate for additional educational costs since the original stipend was established.
3. In the event a State scholarship recipient elects to attend a junior college before entering a four-year institution, his scholarship be retained for him, provided his junior college record meets the level required by the State Scholarship Commission.
4. In addition to the State scholarship program a new and separate bill be enacted to provide subsistence grants to recipients of State scholarships, the amount of such grants to be based on the financial need of the individual students, the maximum amount being that necessary to defray expenses of room and board at the average of such charges to the student in institutionally operated student residences.

5. In view of the need to divert more college graduates into teaching and the need for more funds to provide fellowship assistance to those in graduate training, a new state Graduate Fellowship Program be established to accomplish these purposes and to assist in making it possible for graduate schools to operate at as near capacity as possible.

ADULT EDUCATION

It is recommended that:

1. The "Guiding Principles for Adult Education in California's Publicly Supported Institutions" as revised by the State Advisory Committee on Adult Education in February, 1958, be continued as the policy framework within which coordination is accomplished, such principles to be periodically examined in the light of changing conditions throughout the State.

2. The existing State Advisory Committee be responsible to the coordinating agency and continue the responsibilities delegated to it by action of the State Board of Education and The Regents of the University of California in 1953. Furthermore, that the coordinating agency, to which the Committee will annually report and to which it will make its recommendations, provide the Committee with necessary staff assistance.

3. In order for the State Advisory Committee to be more fully representative of agencies engaged in adult education, it be enlarged to include the following representatives, these to have the same length of terms as other members of this Committee:
   a. A representative of the Agricultural Extension Service of the University of California to be appointed by the President of the University.
   b. A representative of the Independent Colleges and Universities of the State to be appointed by the California Association of Independent Colleges and Universities.

4. In the long-range plans for providing opportunities in higher education to the people of California, provision for adequate State support of adult education services be assured. However, in this determination of what the State should support, effort be made to differentiate between those enrollees who are pursuing a stated planned program with definite occupational or liberal educational objectives, and those who are enrolling in single courses for which matriculation or prerequisites are absent.

TRANSMITTAL OF RECOMMENDATIONS

It is recommended that:

1. The foregoing recommendations, in the form approved by the two Boards, be transmitted by the Superintendent of Public Instruction and the President of the University to the Governor, and to the Legislature through the chairmen of the legislative Committees on Education.
2. The Superintendent of Public Instruction and the President of the University be requested to call to the attention of the Governor the desirability of including in any call for a Special Session of the Legislature in 1960 the consideration of those recommendations which require legislative action.
3. On behalf of the two Boards, the Superintendent of Public Instruction and the President of the University express to the Governor and the Legislature appreciation for this opportunity to place before them and the people of California the views of the two governing Boards on how best to meet the difficult problems of higher education in the next decade.

EXTENDING THE SCHOOL YEAR

RONALD W. COX, *Assistant Chief, Division of Public School Administration, and*

COLLIER McDERMON, *Special Representative, Division of Public School Administration*

It is appropriate that those responsible for education in California give attention to extending the school year. The school day and the school year seem to be too short to accommodate the overcrowded curriculum. Statutory requirements for subjects to be taught and for classes to be maintained create a stress in time, as do also the requirements for college entrance and for courses and curriculums in most fields. Present public pressures demand more study of mathematics, science, and foreign language. No indication has been given of what shall be replaced. The continued stress for ever greater quality in our schools requires increased instructional time to develop breadth in knowledge and depth in understanding.

We are in the midst of a space age, as evidenced by the space probes, satellites, moon shots, guided missiles, and activities related to aeronautics throughout the state and nation. These activities have been undertaken in a context of high public purpose in an atmosphere of intense international competition. A by-product of these undertakings has been a careful and critical look at the schools—how they are organized, administered, and operated, and what they teach. The length of the school year and the length of the school day are factors that have been studied and evaluated.

California has experienced tremendous growth in pupil population, necessitating the construction at great expense of many additional schools. Concurrent with this growth and expense has come a demand for year-round maximum use of school facilities.

California, with an average of 176.8 days per school year, ranked twenty-eighth in a list where the national average was 178.6 days. Illinois ranked first, with 186.3 days; Mississippi last, with 166.7 days.

During the 1956-57 school year, the California school districts which maintained schools for as many as 178 days enrolled only 18.1 per cent of high school students, and only 14.2 per cent of the junior college students. In other words, only a small per cent of California high school and junior college students attended school for terms equal to the national average.

Major Plans for Extending the School Year

The four major plans that have been presented and tried in various school districts are generally referred to as (1) the four-quarter stag-

gered plan; (2) the three-semester plan; (3) extending the length of the school year and day; and (4) the summer session plan. Each of these plans has certain features that merit attention.

The Four-quarter Staggered Plan. The four-quarter staggered plan has been widely discussed and has been tried in a number of school districts. This plan provides for the operation of the schools for four continuous quarters during each year. Each pupil would be enrolled for three quarters (presumably continuous) and be on vacation during one quarter. During each quarter, three-fourths of the pupils would be in school, one-fourth would be on vacation.

This plan was first tried in Bluffton, Indiana, and then abandoned in 1915. By 1925, a total of 13 school districts had experimented with or were experimenting with the plan, but by 1939, no school district was using the plan. Of the 13 districts, only one in Aliquippa, Pennsylvania maintained the program for any length of time, and in Aliquippa's case it was abandoned in 1939, after a ten-year trial. By 1950, only Chattanooga, Tennessee was using the plan. At present no schools are using it.

Proponents of the staggered plan believe that it is the only business-like and economical way to organize schools; that our present setup is an outgrowth of an outdated agricultural economy; and that the strongest objection to the plan comes from school employees. Its supporters claim that the plan (1) provides one-fourth more space for students each year; (2) requires fewer teachers; (3) requires fewer textbooks; (4) makes possible more frequent evaluation of pupils' potentialities and achievements; (5) results in greater economy of operation; (6) eliminates the need for half-day sessions; (7) makes classroom space available for desired class sizes; and (8) gives pupils more opportunity to make up work after extended absences.

The staggered plan presents the following problems:

1. Since one-fourth of the children of school age who reside in the enrollment area of the school would be on vacation at all times, and since the vacation period for each group would be for a quarter of the school year, an over-all enrollment of 120 pupils in each grade would be required to maintain a teacher-pupil ratio of 1 to 30. This pupil-teacher ratio would require for each grade a minimum of three teachers and at least three classrooms.

   In California, where there is a predominance of small elementary schools which enroll fewer pupils than would be required to secure efficient operation of the four-quarter staggered plan (the requirement being an enrollment of 840 for schools maintaining a kindergarten and the first six grades; 1,080 for those maintaining a kindergarten and eight grades), it is apparent that major changes would have to be made in the attendance areas of the schools if the plan

were to be used and the desired economies effected. Obviously, making changes in attendance areas would involve the problem of providing for pupil transportation, an item that would increase the cost of education.

2. The cost of instruction would likely increase as a result of teachers being placed on a 12-month work schedule because class enrollments during certain quarters would be very small while those for other quarters would be unusually large. Such unevenness in enrollment might be caused by shifts of pupil population within the state and by pupils' parents moving into the state.
3. School buildings used on a year-round basis would likely require continuous building maintenance programs. The cost of continuous programs of building renovation with schools in session would most likely be more expensive than maintenance programs completed during summer vacations.
4. Provision would have to be made for air conditioning buildings in many areas before the buildings could be used on a year-round basis. If this were not done the working conditions would be unbearable or at best far from conducive to the quality of work required by the schools.

The plan would probably work better in California high schools than in elementary schools because high school enrollments are generally much greater than those in elementary schools. Use of the plan in the high schools would, however, involve problems such as those posed by the following questions: (1) Would the boys and girls completing elementary school in June be enrolled in high school at the beginning of different quarters and some therefore given extended vacations of two or three quarters, others given no vacation? (2) What provision would be made for enrolling boys and girls who move to California, so that they would not have lengthy vacations forced upon them? (3) Since high school graduation might be attained at the end of any quarter, what provision could be made for graduates to enter an institution of higher learning without first going through rather extended vacation periods?

The disadvantages seen in the plan have kept it from being placed in operation in Richmond, Sacramento, Los Angeles, and San Mateo, California; and in Dallas and Houston, Texas. In Richmond, California, it was estimated that operation of the plan over a 40-year period would require $10 million more than the cost of continued operation under the present program. Communities in which the plan was tried found that it looked better on paper than it worked in practice; and the school districts in which studies of the plan have been made have come to the same conclusions.

Some basic considerations regarding the staggered four-quarter plan follow:

1. Every district that has tried the plan has dropped it.
2. The plan can lead to disruptions of family life unless every child in each family is assigned for school attendance during the same periods.
3. Many pupils would be delayed in beginning high school; and many would be forced to take vacations when the weather is inclement and outdoor activity would be nearly impossible.
4. Operation costs would be greater than under the present system.
5. Too few elementary school districts have enough pupils to make the plan operable and still maintain a teacher-pupil ratio of 1 to 30.
6. Problems presently connected with the opening and closing of the school year would be operative four times each year.
7. Desirable teacher-pupil relationships would be difficult to maintain due to quarterly changes in the pupil population.
8. Teachers would be subjected to additional physical and emotional strain when working on a year-round basis which would likely reduce teaching efficiency.
9. Teaching assignments and teaching loads would be difficult to equalize.
10. Maintenance of the school plant would be more difficult than it is under present conditions.
11. Attendance accounting would be burdensome.
12. Communities would be required to provide recreational facilities other than those of the school for use by pupils on vacation.

The present resurgence of interest on the part of some groups to use this staggered four-quarter plan in California schools makes it necessary for all to understand the principles upon which the plan is based, and the arguments pro and con that are advanced regarding the plan.

The Three-semester Plan. The three-semester plan would allow children to attend school a third semester during the summer months. The children would thus have opportunity to voluntarily speed up their progress through school, make up deficiencies in school work, or take courses that could not be offered during the regular school year—all opportunities of unquestioned merit. The primary objection to this plan is that certain pupils might possibly be advanced to social and maturity levels beyond their capacity. The plan provides for extended use of school facilities, but it does not lessen the problems caused by increasing school enrollments.

Extension of the Length of the School Year. There has existed and there continues to exist some pressure for school districts to lengthen the school year. The proposed extensions would create a school year from 200 to 210 days in length.

One suggestion is to the effect that the six additional weeks (under the 210-day proposal) could be used to give teachers more time for explanation of subject matter, to meet the ever-increasing list of required subjects, and to provide additional instruction in the basic areas. Along with this suggestion it is proposed that teachers be employed for 12 months a year; that they teach ten and one-half months; spend one week before and one week after the school term for in-service training; and have one month of vacation.

Extension of the Length of the School Day. A number of California school districts have adopted a longer school day in order to provide for greater enrichment and broader courses of study than might otherwise be offered. The Los Angeles public schools, which require that children in the third grade attend school for 30 minutes longer than previously, report that good results have been obtained by extending the length of the school day.

Extension of the school day provides considerable additional periods of time for educational purposes during the school year. The following tabulation, based on a school year of 175 days, shows the time gained, annually, by adding 10 to 40 minutes to the school day.

Additional minutes per day	*Hours gained per year*	*Days gained per year*
10	29.2	4.9
20	58.3	9.7
30	87.5	14.6
40	116.7	19.5

This plan is significantly useful at the high school level, especially when the school day is extended sufficiently to permit an extra class period.

Summer Sessions. California school districts have extended the school year for some time by maintaining summer sessions. This practice is growing each year, and an ever-growing number of pupils are seizing the opportunity thus offered them. Most summer schools are organized to meet special needs. Provision is therefore made for pupils who voluntarily attend for (1) enrichment in program; (2) opportunity to do remedial work; (3) completion of their school work at an accelerated rate; and (4) opportunity to follow certain of their interests.

More than a million pupils were enrolled in the 1958 summer sessions offered by California public schools. Such sessions were maintained by 302 elementary school districts, 117 high school districts, and 40 junior college districts.

Courses and programs provided in the summer sessions are subject to the approval of the State Department of Education. The regulations under which such approvals are granted provide for programs of substance and value.

The values and advantages of extension of the school year through summer sessions may be summarized as follows:

1. Maximum flexibility is permitted in adjusting the curriculum offerings to meet the specific needs of different types of youth. Courses of a remedial or make-up nature that might be difficult to offer during a regular session can be offered in a summer session.
2. Provision can be made for selective registration of gifted pupils in courses designed for enrichment purposes.
3. Acceleration opportunities are made available for those pupils who are pursuing specific vocational objectives.
4. Classes are usually smaller and thus teacher-pupil relationships are at peak strength.
5. Increase in the use of school facilities is possible to the extent that pupils grasp the opportunity. This, however, is a secondary consideration. The basic consideration is that pupils' needs are met.

Financing the Extended School Year

Any action to extend the school year will require funds not now being expended for the regular program and this poses a problem for those who must make decisions on money matters.

In California, the growth of summer sessions rather than the adoption of other plans for extending the school year is largely due to the fact that attendance in summer schools is recognized in state apportionments. A day of attendance in a summer session is worth just a little more in state support than a day in regular school for most districts.

California's ranking among the states on the length of the school year is perhaps due to the fact that state apportionments do not recognize any school year longer than 175 days. There is no incentive to increase the length of the school year, for the expense of the additional days must be borne entirely from district tax funds. This deterrent to a more adequate school year was reported to the 1959 Legislature by the State Department of Education in *A Report to the California Legislature on the Study of Public School Support*. The Department recommended that apportionments be allowed for extending the school year by five days. The cost to the state of such a program was estimated to be fourteen and a half million dollars. Governor Brown made no provision in his budget for such an expenditure and the Legislature did not adopt the recommendation. The recommendation will again be presented to the Legislature at the next opportunity by the Department of Education, for the Department is of the opinion that school boards should be free to determine the desired length of the school year on the basis of the educational values involved, uninhibited by serious financial consideration and problems.

SPECIAL PURPOSE APPORTIONMENT OF THE STATE SCHOOL FUND, 1959-60

RAY H. JOHNSON, *Chief, Bureau of School Apportionments and Reports*

The Special Purpose Apportionment of the State School Fund for the fiscal year 1959-60, was certified by the Superintendent of Public Instruction to the State Controller, State Treasurer, State Department of Finance, county auditors, county treasurers, and county superintendents of schools on December 10, 1959, in the amount of $40,485,797. This Special Purpose Apportionment included allowances for excess expense for the education of physically handicapped and mentally retarded minors, for the the transportation of pupils, for automobile driver training, and for project-connected pupils. It also included apportionments, previously withheld from small elementary and small high schools, which were released because additional teachers were employed.

An analysis of the Special Purpose Apportionment, including comparative amounts for the preceding fiscal year, is shown in Table 1.

Sections of the Education Code specify the amounts which may be apportioned for the purposes included in the Special Purpose Appor-

TABLE 1

APPORTIONMENTS FOR VARIOUS SPECIAL PURPOSES
1958-59 AND 1959-60

Basis for apportionment	Amount of special purpose apportionment		Per cent of increase or decrease
	1958-59	1959-60	
Excess expense reimbursement			
Physically handicapped	$8,300,847	$12,261,851	47.7
Mentally retarded	4,650,287	8,460,060	81.9
Severely mentally retarded	669,416	1,084,560	62.0
Reimbursement for transportation			
Certain physically handicapped and mentally retarded minors	1,613,953	2,299,738	42.5
All other pupils	11,832,405	12,586,092	6.4
Excess expense reimbursement for pupils instructed in driver training	2,916,090	3,424,621	17.4
Project-connected pupil allowance	11,492	1,928	—83.2
Amounts withheld from the Principal Apportionment and released in the Special Purpose Apportionment for additional teachers employed by			
Small elementary schools	63,747	53,793	—15.6
Small high schools	--	*313,154	--
Total	$30,058,237	$40,485,797	34.7

* The law provides for the withholding and release of moneys relating to certificated employees in small high schools for the first time in 1959-60.

tionment. Education Code Section 17303,[1] in subsections (c) and (d), sets limits on amounts to be apportioned for transportation of pupils and for excess expense of educating physically handicapped and mentally retarded pupils in the several categories. Education Code Section 17305, in subsection (a), provides for an amount necessary to reimburse school districts for the actual cost of instructing pupils in the operation of motor vehicles, not to exceed $35 per pupil trained. Education Code Section 17307 provides for an amount necessary for project-connected pupils. Education Code Sections 17404-17404.5 set forth the provisions for releasing amounts previously withheld from small elementary and small high schools, if the required number of teachers were employed by November 10, 1959.

The law provides a method for reducing amounts computed for certain purposes when such amounts are in excess of the statutory limits. The amount computed under the provisions of law for physically handicapped and mentally retarded pupils exceeded the statutory limit by $536,707. It was necessary, therefore, to reduce the computations proportionately. A reduction factor of 0.97822064 was used for this purpose. The amounts apportioned for the purposes mentioned are shown in Table 1. The amount computed under the provisions of law for the transportation of pupils to and from the regular day schools exceeded the amount made available by law by $441,894. As prescribed under Education Code Section 18061, it was necessary, therefore, to reduce the computations by increasing the lower tax rate prescribed in the formula by 4 mils ($0.004).

Average daily attendance is an important factor used in computing allowances for the physically handicapped and mentally retarded pupils. Allowances for the excess expense of educating mentally retarded minors cannot exceed $375 per unit of a.d.a. of such minors. The allowances for physically handicapped cannot exceed $910 per unit of a.d.a. and the allowances for severely mentally retarded minors cannot exceed $670 per unit of a.d.a. of such minors. An additional amount not in excess of $910 may be allowed for the excess expense for each unit of a.d.a. of blind pupils when a reader has actually been provided to assist in the education of such pupils, or for the purchase of special books, supplies and equipment for blind pupils. If physically handicapped pupils having impaired vision or hearing are transported to schools maintained by other than the district of residence of the pupil, the allowance for the excess expense of transportation is limited to $350 per unit of a.d.a. The allowances for the excess expense of transporting all other physically handicapped and severely mentally retarded minors to and from special day classes cannot exceed $475 per unit of a.d.a. A comparison of the state total of a.d.a. for the fiscal years 1957-58 and

[1] Amended by the Statutes of 1959, Chapter 1251 (Assembly Bill No. 1000).

1958-59, credited to school districts and the County School Service Fund is shown in Table 2.

TABLE 2

AVERAGE DAILY ATTENDANCE OF PHYSICALLY HANDICAPPED AND MENTALLY RETARDED MINORS ACCORDING TO GRADE LEVELS

Grade level	Average daily attendance					
	Physically handicapped minors			Mentally retarded minors		
	1957-58	1958-59	Per cent of increase or decrease	1957-58	1958-59	Per cent of increase or decrease
Elementary schools						
Junior high grades 7-8	1,721	1,717	—0.2	3,299	3,605	9.3
Other elementary	8,382	9,600	14.5	16,725	18,848	12.7
County School Service Fund	559	593	6.1	2,848	3,189	12.0
Total elementary schools	10,662	11,910	11.7	22,872	25,642	12.1
High schools						
High schools	3,824	4,125	7.9	5,077	6,039	18.9
County School Service Fund	42	35	—16.7	--	--	--
Total high schools	3,866	4,160	7.6	5,077	6,039	18.9
Junior colleges	16	23	43.8	--	--	--
Grand total	14,544	16,093	10.7	*27,949	†31,681	13.4

* Includes 1,673 units of average daily attendance for severely mentally retarded minors.
† Includes 1,986 units of average daily attendance for severely mentally retarded minors.

The number of pupils trained is a factor used in computing the allowances for the excess expense for pupils instructed in automobile driver training. The apportionment to each district amounts to $35 for each pupil trained but not in excess of the current expense of conducting the program. The number of pupils trained increased from 84,559 in 1957-58, to 98,832 in 1958-59, an increase of 16.9 per cent. During the fiscal year 1958-59, there were 270 districts reporting expenses for this type of instruction. The maximum allowance per pupil trained was received by 224 districts. The remaining 46 districts received allowances equal to the actual current expense reported. A comparison of the allowances computed on these bases for the fiscal years 1958-59 and 1959-60, and the number of districts reporting such excess expense during the preceding fiscal years 1957-58 and 1958-59, respectively, are shown in Table 3.

The amount allowed as state aid for transportation of pupils is based upon the current expenses of transportation, for the preceding fiscal year, of pupils between their homes and the regular, full-time day

schools. The partial reimbursements to districts were based upon approved expenses of $23,634,078.82 for the fiscal year 1958-59, and upon approved expenses of $21,411,608 for the fiscal year 1957-58, subject to the provisions of Education Code Sections 18053-18060.

TABLE 3

APPORTIONMENTS FOR REIMBURSING SCHOOL DISTRICTS FOR COST OF DRIVER INSTRUCTION

Basis for reimbursement	Number of districts			Amounts allowed		
	1957-58	1958-59	Per cent of increase or decrease	1958-59	1959-60	Per cent of increase or decrease
Current expense of driver instruction	34	46	35.3	$251,925	$309,516	22.9
$35 for each pupil trained	223	224	0.4	2,664,165	3,115,105	16.9
Total	257	270	5.1	$2,916,090	$3,424,621	17.5

The Special Purpose Apportionment includes an amount allowed for the a.d.a. of certain pupils as defined by law who had enrolled in the regular full-time day schools subsequent to the commencement of a project under the jurisdiction of the State Department of Water Resources. The amount of $1,928 shown as the project-connected pupil allowance in Table 1 was allocated to the Thermalito School District of Butte County, and was computed for the 38 a.d.a. of such pupils enrolled because of the Oroville phase of the Feather River Project.

An amount of $53,793.00, representing the allowance to small elementary districts for the employment of additional teachers was made to 13 districts each of which had reported that one additional full-time teacher was hired by November 10, 1959. This leaves a remainder of $87,945.00 from the amount of $141,738.00 previously withheld from elementary districts at the time of the Principal Apportionment.[2]

The amount of $313,154, representing the allowance to high school districts for the additional number of certificated employees was made to 28 school districts employing such additional personnel by November 10, 1959. This leaves a remainder of $103,375 from the amount of $416,529 previously withheld from high school districts at the time of the Principal Apportionment. The two remaining amounts will be apportioned as part of the Final Apportionment.

The State School Fund for this fiscal year amounts to $638,023,379.00. This represents $201.10 for each of the 3,155,263 units of a.d.a. in the public schools last year, an amount of $634,523,389.00, to which is

[2] Reported in *California Schools*, XXX (December, 1959) 490-97.

added the allowances of the automobile driver training program, amounting to $3,424,621, the special allowance for project-connected pupils in the amount of $1,928 and $73,441 for corrections of prior years' apportionments.

After deducting the Principal Apportionment and the Special Purpose Apportionment from the total of the State School Fund, there remains an amount of $35,433,258 to be apportioned during this fiscal year. The scheduled apportionments are as follows:

A. First Period Apportionment for Growth, scheduled for February 20, 1960

A maximum of $13,908,399 may be apportioned at that time.

B. Second Period Apportionment for Growth, scheduled for June 25, 1960

An amount of $20,862,599 is reserved by law for the Second Period Apportionment for Growth, if needed; and this amount may be augmented by any portion of the amount reserved, but not actually needed, for the First Period Apportionment for Growth.

C. Apportionments for the Reimbursement of County School Service Funds

Apportionments will be made as needed during the fiscal year for the reimbursement of county school service funds, based upon claims filed by county superintendents of schools not later than June 10, 1960, for approved emergency purposes, when and to the extent such emergencies have materialized, in a total amount of not more than $207,850.

D. Final Apportionment, scheduled for June 25, 1960

The provisions of law require that any unused remainders of any amounts reserved by law for previous apportionments but not needed for actual allowances shall be apportioned as a Final Apportionment; and that these remainders be applied in the following order to restore amounts which may have been reduced.

Equalization aid (Principal Apportionment)
Allowances for growth (First Period Growth)
Allowances for growth (Second Period Growth)
Allowances for physically handicapped, mentally retarded, and severely mentally retarded minors (Special Purpose Apportionment)
Transportation aid (Special Purpose Apportionment)

Thereafter, any remaining balance shall be allowed as additional state aid to all school districts. Should the remaining balance provide in excess of $5 per unit of a.d.a. to such districts, the excess shall then be apportioned to all districts which receive equalization aid on the basis of a.d.a.

NOTE: The sum of the unused remainders to date, not including amounts reserved by law in Items A, B, and C, is $454,410.

ENROLLMENT IN CALIFORNIA PUBLIC SCHOOLS, OCTOBER 31, 1959

Prepared in the BUREAU OF EDUCATION RESEARCH by
Henry W. Magnuson, Chief, and Peter J. Tashnovian, Consultant

This semiannual compilation of data on active enrollment in the public schools of California as of October 31, 1959, has been prepared from reports of officials of the school districts.

In Table 1, totals are shown for the state, by sex, for each grade and special classification; in Tables 2 and 4, a comparison is made with similar data for October 31, 1958; and in Tables 3 and 5, the figures on enrollment are presented according to grade level, by sex, and by county. In Table 6, the enrollment of pupils on half-day sessions is shown by grade and by county.

Enrollment in regular grades only, from kindergarten through grade fourteen, as shown in Tables 2 and 4, increased 185,795 (6 per cent) over the enrollment reported a year earlier. Comparable figures for October 31, 1958, showed an increase of 182,955 (6.3 per cent) over those reported on October 31, 1957.

Total enrollment in all regular grades and all special classes was 3,800,310, an increase of 216,955 (6.1 per cent) over the total for October 31, 1958. This increase may be compared to that of 208,476 (6.2 per cent) on October 31, 1958, over the figures reported on October 31, 1957.

The increase in graded enrollment in kindergarten and elementary grades between October 31, 1958, and October 31, 1959, was 6.6 per cent as compared with an increase of 5.3 per cent during the previous year. Enrollment in grades nine through twelve increased 6.3 per cent as compared with 8.2 per cent on October 31, 1958. In junior colleges there was a decrease of 5.3 per cent in graded enrollment in 1959, compared with that of 1958; whereas in 1958, there was an increase of 15.1 per cent over that of 1957.

Junior college enrollment is reported as full-time or part-time. Students enrolled in programs yielding 12 or more credit hours are considered full-time students.

Enrollment in grades seven, eight, and nine in junior high schools is reported separately from that in elementary schools and four-year high schools, in order that the total enrollment in junior high schools may be readily computed.

Table 6 contains data regarding the enrollment of pupils on half-day sessions, by grade and county. As of October 31, 1959, there were 108,691 elementary school and 10,354 high school pupils (including junior high school), or a total of 119,045 pupils on half-day sessions. This is an increase of 5,942 in enrollment on half-day sessions from that of the previous year.

TABLE 1

SUMMARY OF ACTIVE ENROLLMENT IN CALIFORNIA PUBLIC SCHOOLS
October 31, 1959

Grade or class	Male	Female	Total
GRADED ENROLLMENT			
Kindergarten	154,269	147,246	301,515
Grade one	158,398	147,111	305,509
Grade two	146,204	138,861	285,065
Grade three	138,463	131,782	270,245
Grade four	132,059	126,972	259,031
Grade five	131,139	126,994	258,133
Grade six	128,423	124,330	252,753
Grade seven in elementary schools	59,827	56,079	115,906
Grade seven in junior high schools	65,857	62,549	128,406
Grade eight in elementary schools	54,890	53,402	108,292
Grade eight in junior high schools	61,905	60,806	122,711
Total enrollment, kindergarten through grade eight	*1,231,434*	*1,176,132*	*2,407,566*
Grade nine in junior high schools	49,098	47,395	96,493
Grade nine in four-year high schools	54,306	50,873	105,179
Grade ten	101,839	97,044	198,883
Grade eleven	92,328	87,573	179,901
Grade twelve	74,863	74,348	149,211
Total enrollment, grades nine through twelve	*372,434*	*357,233*	*729,667*
Grade thirteen			
Full-time	38,468	21,377	59,845
Part-time	19,514	12,070	31,584
Grade fourteen			
Full-time	19,586	8,397	27,983
Part-time	7,599	3,433	11,032
Total enrollment, grades thirteen and fourteen	*85,167*	*45,277*	*130,444*
Total enrollment, kindergarten and grades one through fourteen	*1,689,035*	*1,578,642*	*3,267,677*
ENROLLMENT OF ADULTS AND IN SPECIAL CLASSES			
Ungraded pupils in elementary schools	892	250	1,142
Postgraduate pupils in elementary schools			
Pupils in special day and evening classes in elementary schools	47	28	75
Special classes for physically handicapped minors:			
Elementary schools	3,801	2,908	6,709
Grades seven and eight in junior high schools	240	197	437
High school level	722	979	1,701
Special classes for mentally retarded minors:			
Elementary schools	15,199	9,994	25,193
Grades seven and eight in junior high schools	2,452	1,633	4,085
High school level	4,233	2,830	7,063
Pupils in compulsory continuation classes	2,678	1,389	4,067
Special pupils:			
High school level	2,116	924	3,040
Junior college level			
Full-time	1,505	921	2,426
Part-time	7,366	6,664	14,030
Adults:			
High school level	105,520	192,251	297,771
Junior college level	91,851	73,043	164,894
Summary of enrollment of adults and in special classes:			
Elementary school level	*22,631*	*15,010*	*37,641*
High school level	*116,269*	*198,373*	*313,642*
Junior college level	*100,729*	*80,628*	*181,350*
Total enrollment of adults and in special classes	*238,629*	*294,011*	*532,633*
GRAND TOTAL, GRADED ENROLLMENT AND ENROLLMENT IN SPECIAL CLASSES	1,927,657	1,872,653	3,800,310
Enrollment on half-day sessions:			
Grades one through eight			112,063
Grades nine through twelve			6,982

TABLE 2

COMPARISON OF GRADED AND SPECIAL CLASS ENROLLMENTS FOR OCTOBER 31, 1958 AND OCTOBER 31, 1959

Grade or class	October 31, 1958	October 31, 1959	Increase or decrease between October 1958 and October 1959	
			Number	Per cent
Kindergarten	284,068	301,515	17,447	6.1
Grade one	289,970	305,509	15,539	5.4
Grade two	267,820	285,065	17,245	6.4
Grade three	256,316	270,245	13,929	5.4
Grade four	253,907	259,031	5,124	2.0
Grade five	248,840	258,133	9,293	3.7
Grade six	234,373	252,753	18,380	7.8
Grade seven	227,612	244,312	16,700	7.3
Grade eight	194,734	231,003	36,269	18.6
Total enrollment, kindergarten thorugh grade eight	*2,257,640*	*2,407,566*	*149,926*	*6.6*
Grade nine	198,313	201,672	3,359	1.7
Grade ten	193,853	198,883	5,030	2.6
Grade eleven	168,421	179,901	11,480	6.8
Grade twelve	125,941	149,211	23,270	18.5
Total enrollment, grades nine through twelve	*686,528*	*729,667*	*43,139*	*6.3*
Grade thirteen	(95,372)	(91,429)	—(3,943)	—4.1
Full-time	59,898	59,845	—53	—.1
Part-time	35,474	31,584	—3,890	—11.0
Grade fourteen	(42,342)	(39,015)	—(3,327)	—7.9
Full-time	29,572	27,983	—1,589	—5.4
Part-time	12,770	11,032	—1,738	—13.6
Total enrollment, grades thirteen and fourteen	*137,714*	*130,444*	*—7,270*	*—5.3*
Total enrollment, kindergarten through grade fourteen	*3,081,882*	*3,267,677*	*185,795*	*6.0*
Special enrollment classifications in elementary schools:				
Ungraded pupils in elementary schools	1,257	1,142	—155	—9.1
Postgraduate pupils in elementary schools				
Pupils in special day and evening classes in elementary schools	68	75	7	10.3
Total, special enrollment classifications in elementary schools	*1,325*	*1,217*	*—108*	*—8.2*
Special classes for physically handicapped minors:				
Elementary schools	6,626	6,709	83	1.3
Grades seven and eight in junior high schools	449	437	—12	—2.7
High school level	1,653	1,701	48	2.9
Junior college level	1		—1	
Total, special classes for physically handicapped minors	*8,729*	*8,847*	*118*	*1.4*
Special classes for mentally retarded minors:				
Elementary schools	21,758	25,193	3,435	15.8
Grades seven and eight in junior high schools	3,687	4,085	398	10.8
High school level	6,449	7,063	614	9.5
Total, special classes for mentally retarded minors	*31,894*	*36,341*	*4,447*	*13.9*
Pupils in compulsory continuation classes	4,342	4,067	—275	—6.3
Special pupils:				
High school level	3,230	3,040	—190	—5.9
Junior college level	(10,227)	(16,456)	(6,229)	60.9
Full-time	1,955	2,426	471	24.1
Part-time	8,272	14,030	5,758	69.6
Total, special pupils in regular classes	*13,457*	*19,496*	*6,039*	*44.9*
Adults:				
High school level	287,484	297,771	10,287	3.6
Junior college level	154,242	164,894	10,652	6.9
Total, adults	*441,726*	*462,665*	*20,939*	*4.7*
TOTAL, all grades and classes	3,583,355	3,800,310	216,955	6.1

TABLE 3

GRADED ENROLLMENT, BY COUNTIES

County	Kindergarten			Grade one			Grade two		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Alameda	8,889	8,550	17,439	8,758	8,051	16,809	8,125	7,608	15,733
Alpine				4	2	6	7	8	15
Amador	65	85	150	80	94	174	88	83	171
Butte	662	617	1,279	832	771	1,603	759	721	1,480
Calaveras	58	63	121	118	103	221	89	98	187
Colusa	108	128	236	125	126	251	116	114	230
Contra Costa	4,974	4,802	9,776	5,055	4,727	9,782	4,755	4,649	9,404
Del Norte	155	136	291	222	213	435	189	204	393
El Dorado	222	221	443	303	326	629	286	324	610
Fresno	3,902	3,724	7,626	5,111	4,442	9,553	4,578	4,111	8 689
Glenn	138	107	245	239	199	438	208	175	383
Humboldt	1,076	994	2,070	1,341	1,248	2,589	1,293	1,136	2,429
Imperial	731	710	1,441	1,004	925	1,929	857	712	1,569
Inyo	100	104	204	121	136	257	139	136	275
Kern	3,293	3,119	6,412	3,657	3,327	6,984	3,411	3,223	6,634
Kings	523	425	948	703	620	1,323	623	557	1,180
Lake	86	62	148	104	128	232	118	114	232
Lassen	146	133	279	168	154	322	160	151	311
Los Angeles	57,154	54,435	111,589	54,295	51,510	105,805	51,201	48,878	100,079
Madera	403	406	809	538	513	1,051	449	475	924
Marin	1,507	1,426	2,933	1,474	1,362	2,836	1,365	1,254	2,619
Mariposa	21	23	44	49	43	92	44	40	84
Mendocino	350	360	710	653	564	1,217	563	536	1,099
Merced	946	960	1,906	1,247	1,060	2,307	1,099	1,011	2,110
Modoc	65	52	117	95	77	172	109	101	210
Mono				30	26	56	26	26	52
Monterey	2,023	1,958	3,981	2,076	1,932	4,008	1,838	1,768	3,606
Napa	537	481	1,018	583	522	1,105	548	482	1,030
Nevada	105	83	188	171	158	329	149	159	308
Orange	8,409	8,080	16,489	7 874	7,507	15,381	7,575	7,093	14,668
Placer	580	509	1,089	664	593	1,257	591	507	1,098
Plumas	111	91	202	134	131	265	121	115	236
Riverside	2,963	2,841	5,804	3,054	2,975	6,029	2,986	2,891	5.877
Sacramento	5,717	5,403	11,120	5,599	5,349	10,948	5,109	4,849	9,958
San Benito	127	96	223	188	174	362	161	151	312
San Bernardino	5,331	5,012	10,343	5,747	5,318	11,065	4,967	4,964	9,931
San Diego	10,416	9,996	20,412	10,622	9,803	20,425	9,351	9,041	18,392
San Francisco	4,375	4,193	8,568	4,256	3,737	7,993	3,882	3,791	7,673
San Joaquin	2,329	2,184	4,513	2,808	2,494	5,302	2,520	2,403	4,923
San Luis Obispo	706	656	1,362	818	751	1,569	778	729	1,507
San Mateo	4,935	4,797	9,732	4,673	4,244	8,917	4,395	4 314	8,709
Santa Barbara	1,590	1,484	3,074	1,857	1,603	3,460	1,538	1,407	2,945
Santa Clara	7,535	7,203	14,738	7 760	6,940	14,700	7,099	6,624	13,723
Santa Cruz	689	654	1,343	762	685	1,447	727	668	1,395
Shasta	574	620	1,194	720	635	1,355	723	626	1,349
Sierra	12	19	31	27	34	61	29	28	57
Siskiyou	278	284	562	392	362	754	362	357	719
Solano	1,489	1,417	2,906	1,559	1,465	3,024	1,372	1,345	2,717
Sonoma	1,227	1,095	2,322	1,490	1,363	2,853	1,360	1,324	2,684
Stanislaus	1,539	1,536	3,075	1,910	1,695	3,605	1,668	1,576	3,244
Sutter	294	294	588	402	369	771	342	349	691
Tehama	207	210	417	265	280	545	278	260	538
Trinity	77	78	155	107	115	222	104	108	212
Tulare	1,595	1,455	3,050	2,080	1,958	4,038	1,917	1,720	3,637
Tuolumne	88	105	193	147	128	275	139	123	262
Ventura	1,904	1,864	3,768	2,200	2,015	4,215	1,892	1,708	3,600
Yolo	638	627	1,265	710	684	1,394	673	624	1,297
Yuba	295	279	574	417	345	762	353	312	665
Total	154,269	147,246	301,515	158,398	147,111	305,509	146,204	138,861	285,065

TABLE 3—Continued
GRADED ENROLLMENT, BY COUNTIES

County	Grade three			Grade four			Grade five		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Alameda	7,617	7,074	14,691	7,417	7,060	14,477	7,415	7,229	14,644
Alpine	3	2	5	4	3	7	4	7	11
Amador	93	75	168	98	86	184	87	88	175
Butte	752	689	1,441	751	666	1,417	724	690	1,414
Calaveras	98	87	185	104	80	184	93	107	200
Colusa	110	114	224	113	96	209	125	108	233
Contra Costa	4,753	4,365	9,118	4,399	4,262	8,661	4,516	4,250	8,766
Del Norte	203	165	368	190	189	379	187	173	360
El Dorado	319	277	596	321	262	583	311	275	586
Fresno	4,009	4,004	8,013	4,104	3,878	7,982	3,999	3,784	7,783
Glenn	194	188	382	204	179	383	190	167	357
Humboldt	1,104	1,062	2,166	1,090	1,024	2,114	1,111	1,059	2,170
Imperial	776	759	1,535	686	678	1,364	675	763	1,438
Inyo	126	127	253	119	106	225	116	148	264
Kern	3,267	3,093	6,360	3,140	2,964	6,104	3,175	2,800	5,975
Kings	633	517	1,150	544	528	1,072	585	520	1,105
Lake	107	101	208	123	82	205	110	118	228
Lassen	156	153	309	151	145	296	164	140	304
Los Angeles	48,646	46,807	95,453	45,944	44,605	90,549	45,390	44,735	90,125
Madera	504	457	961	432	431	863	481	427	908
Marin	1,318	1,181	2,499	1,207	1,155	2,362	1,191	1,149	2,340
Mariposa	45	48	93	35	37	72	34	29	63
Mendocino	549	514	1,063	519	515	1,034	567	487	1,054
Merced	941	917	1,858	926	879	1,805	987	899	1,886
Modoc	85	101	186	104	96	200	89	95	184
Mono	18	17	35	21	21	42	21	30	51
Monterey	1,743	1,751	3,494	1,678	1,630	3,308	1,698	1,535	3,233
Napa	553	452	1,005	512	497	1,009	476	484	960
Nevada	157	145	302	143	137	280	177	142	319
Orange	7,073	6,650	13,723	6,620	6,386	13,006	6,573	6,391	12,964
Placer	579	540	1,119	592	530	1,122	549	546	1,095
Plumas	127	134	261	122	105	227	122	120	242
Riverside	2,689	2,620	5,309	2,655	2,561	5,216	2,561	2,551	5,112
Sacramento	4,863	4,766	9,629	4,685	4,544	9,229	4,666	4,501	9,167
San Benito	152	121	273	115	127	242	148	139	287
San Bernardino	4,902	4,800	9,702	4,637	4,454	9,091	4,635	4,421	9,056
San Diego	8,767	8,252	17,019	8,214	8,309	16,523	8,224	8,033	16,257
San Francisco	3,764	3,491	7,255	3,821	3,535	7,356	3,809	3,570	7,379
San Joaquin	2,396	2,282	4,678	2,331	2,153	4,484	2,299	2,231	4,530
San Luis Obispo	729	649	1,378	670	615	1,285	664	664	1,328
San Mateo	4,183	3,980	8,163	4,011	3,860	7,871	4,043	3,777	7,820
Santa Barbara	1,380	1,373	2,753	1,439	1,352	2,791	1,311	1,311	2,622
Santa Clara	6,525	6,195	12,720	6,099	5,727	11,826	6,051	5,863	11,914
Santa Cruz	697	660	1,357	632	644	1,276	660	615	1,275
Shasta	647	561	1,208	633	598	1,231	640	607	1,247
Sierra	29	24	53	30	22	52	24	26	50
Siskiyou	389	369	758	368	346	714	328	318	646
Solano	1,234	1,170	2,404	1,257	1,134	2,391	1,245	1,102	2,347
Sonoma	1,305	1,264	2,569	1,277	1,260	2,537	1,283	1,239	2,522
Stanislaus	1,650	1,457	3,107	1,539	1,422	2,961	1,496	1,482	2,978
Sutter	365	309	674	313	327	640	338	330	668
Tehama	261	270	531	262	243	505	258	236	494
Trinity	106	109	215	102	99	201	88	79	167
Tulare	1,823	1,690	3,513	1,694	1,607	3,301	1,758	1,625	3,383
Tuolumne	154	121	275	156	116	272	117	139	256
Ventura	1,826	1,768	3,594	1,747	1,727	3,474	1,655	1,762	3,417
Yolo	662	621	1,283	636	582	1,218	597	598	1,195
Yuba	307	294	601	323	296	619	299	280	579
Total	138,463	131,782	270,245	132,059	126,972	259,031	131,139	126,994	258,133

TABLE 3—Continued

GRADED ENROLLMENT, BY COUNTIES

County	Grade six			Grade seven in elementary schools			Grade seven in junior high schools		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Alameda	7,314	6,894	14,208	3,854	3,693	7,547	2,846	2,770	5,616
Alpine	4	3	7	6	3	9			
Amador	92	91	183	84	95	179			
Butte	708	702	1,410	347	319	666	369	377	746
Calaveras	99	78	177	95	91	186			
Colusa	115	96	211	96	82	178	24	19	43
Contra Costa	4,415	4,298	8,713	1,133	1,093	2,226	3,129	2,925	6,054
Del Norte	201	162	363	161	179	340			
El Dorado	305	277	582	297	274	571			
Fresno	3,866	3,728	7,594	1,826	1,641	3,467	1,822	1,782	3,604
Glenn	178	169	347	176	169	345			
Humboldt	1,065	983	2,048	656	594	1,250	386	386	772
Imperial	690	695	1,385	613	637	1,250			
Inyo	128	118	246	127	117	244			
Kern	3,002	2,954	5,956	2,815	2,688	5,503	93	75	168
Kings	552	465	1,017	501	486	987			
Lake	128	123	251	136	110	246			
Lassen	166	144	310	129	126	255	11	10	21
Los Angeles	44,142	43,871	88,013	13,461	12,604	26,065	30,508	29,127	59,635
Madera	475	449	924	475	402	877			
Marin	1,202	1,185	2,387	1,166	1,076	2,242			
Mariposa	43	40	83	36	34	70			
Mendocino	529	487	1,016	280	277	557	270	236	506
Merced	908	834	1,742	811	709	1,520	142	131	273
Modoc	76	94	170	90	98	188			
Mono	15	17	32	23	17	40			
Monterey	1,666	1,574	3,240	1,241	1,015	2,256	444	421	865
Napa	528	517	1,045	76	70	146	466	431	897
Nevada	178	152	330	50	59	109	114	130	244
Orange	6,496	6,240	12,736	3,488	3,323	6,811	2,769	2,678	5,447
Placer	537	542	1,079	513	456	969			
Plumas	107	126	233	1	3	4	119	105	224
Riverside	2,596	2,493	5,089	541	542	1,083	2,008	1,863	3,871
Sacramento	4,696	4,425	9,121	1,860	1,704	3,564	2,543	2,479	5,022
San Benito	136	109	245	132	125	257			
San Bernardino	4,536	4,302	8,838	1,703	1,595	3,298	2,692	2,617	5,309
San Diego	8,234	7,814	16,048	2,779	2,571	5,350	5,406	5,138	10,544
San Francisco	3,495	3,388	6,883	22	42	64	3,257	2,973	6,230
San Joaquin	2,226	2,222	4,448	1,056	996	2,052	1,179	1,107	2,286
San Luis Obispo	723	615	1,338	400	397	797	273	233	506
San Mateo	3,815	3,727	7,542	3,750	3,510	7,260			
Santa Barbara	1,296	1,308	2,604	416	427	843	857	769	1,626
Santa Clara	5,818	5,496	11,314	4,227	3,910	8,137	1,485	1,333	2,818
Santa Cruz	598	602	1,200	387	356	743	258	235	493
Shasta	613	550	1,163	585	571	1,156			
Sierra	30	21	51	7	9	16	15	12	27
Siskiyou	351	319	670	351	311	662	19	14	33
Solano	1,236	1,193	2,429	613	597	1,210	623	551	1,174
Sonoma	1,341	1,227	2,568	396	389	785	867	856	1,723
Stanislaus	1,561	1,440	3,001	1,556	1,457	3,013			
Sutter	306	303	609	317	339	656			
Tehama	272	221	493	244	213	457			
Trinity	85	97	182	100	87	187			
Tulare	1,791	1,646	3,437	1,634	1,540	3,174	89	78	167
Tuolumne	146	141	287	148	125	273			
Ventura	1,684	1,696	3,380	1,066	935	2,001	680	610	1,290
Yolo	602	553	1,155	483	491	974	94	78	172
Yuba	306	314	620	291	300	591			
Total	128,423	124,330	252,753	59,827	56,079	115,906	65,857	62,549	128,406

TABLE 3—Continued
GRADED ENROLLMENT, BY COUNTIES

County	Grade eight in elementary schools			Grade eight in junior high schools			Total, kindergarten through grade eight		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Alameda	3,623	3,611	7,234	2,970	2,848	5,818	68,828	65,388	134,216
Alpine		3	3				32	31	63
Amador	94	71	165				781	768	1,549
Butte	368	340	708	337	332	669	6,609	6,224	12,833
Calaveras	75	85	160				829	792	1,621
Colusa	97	83	180	21	14	35	1,050	980	2,030
Contra Costa	1,120	1,025	2,145	3,095	3,112	6,207	41,344	39,508	80,852
Del Norte	145	141	286				1,653	1,562	3,215
El Dorado	272	270	542				2,636	2,506	5,142
Fresno	1,606	1,531	3,137	1,714	1,672	3,386	36,537	34,297	70,834
Glenn	166	175	341				1,693	1,528	3,221
Humboldt	567	491	1,058	326	327	653	1,015	9,304	19,319
Imperial	587	548	1,135				6,619	6,427	13,046
Inyo	127	96	223				1,103	1,088	2,191
Kern	2,669	2,621	5,290	81	84	165	28,603	26,948	55,551
Kings	478	449	927				5,142	4,567	9,709
Lake	106	119	225				1,018	957	1,975
Lassen	154	115	269	15	12	27	1,420	1,283	2,703
Los Angeles	12,625	12,159	24,784	28,618	28,148	56,766	431,984	416,879	848,863
Madera	460	395	855				4,217	3,955	8,172
Marin	1,092	1,123	2,215				11,522	10,911	22,433
Mariposa	39	45	84				346	339	685
Mendocino	228	253	481	194	181	375	4,702	4,410	9,112
Merced	667	664	1,331	117	132	249	8,791	8,196	16,987
Modoc	80	83	163				793	797	1,590
Mono	19	10	29				173	164	337
Monterey	945	973	1,918	363	396	759	15,715	14,953	30,668
Napa	58	76	134	404	423	827	4,741	4,435	9,176
Nevada	46	41	87	118	117	235	1,408	1,323	2,731
Orange	3,275	3,236	6,511	2,437	2,406	4,843	62,589	59,990	122,579
Placer	542	451	993				5,147	4,674	9,821
Plumas		1	1	133	108	241	1,097	1,039	2,136
Riverside	537	491	1,028	1,780	1,741	3,521	24,370	23,569	47,939
Sacramento	1,613	1,622	3,265	2,354	2,359	4,713	43,735	42,001	85,736
San Benito	102	104	206				1,261	1,146	2,407
San Bernardino	1,374	1,312	2,686	2,767	2,700	5,467	43,291	41,495	84,786
San Diego	2,529	2,466	4,995	4,839	4,687	9,526	79,381	76,110	155,491
San Francisco	19	36	55	3,265	3,006	6,271	33,965	31,762	65,727
San Joaquin	933	937	1,870	1,142	1,153	2,295	21,219	20,162	41,381
San Luis Obispo	391	380	771	214	218	432	6,366	5,907	12,273
San Mateo	3,470	3,478	6,948				37,275	35,687	72,962
Santa Barbara	381	392	773	748	797	1,545	12,813	12,223	25,036
Santa Clara	3,804	3,835	7,639	1,366	1,409	2,775	57,769	54,535	112,304
Santa Cruz	350	357	707	263	274	537	6,023	5,750	11,773
Shasta	546	527	1,073				5,681	5,295	10,976
Sierra	3	5	8	14	16	30	220	216	436
Siskiyou	258	274	532	20	23	43	3,116	2,977	6,093
Solano	570	549	1,119	582	539	1,121	11,780	11,062	22,842
Sonoma	374	367	741	773	811	1,584	11,693	11,195	22,888
Stanislaus	1,342	1,329	2,671				14,261	13,394	27,655
Sutter	300	270	570				2,977	2,890	5,867
Tehama	241	217	458				2,288	2,150	4,438
Trinity	87	88	175				856	860	1,716
Tulare	1,477	1,392	2,869	71	72	143	15,929	14,783	30,712
Tuolumne	137	115	252				1,232	1,113	2,345
Ventura	974	880	1,854	677	597	1,274	16,305	15,562	31,867
Yolo	466	456	922	87	92	179	5,648	5,406	11,054
Yuba	252	239	491				2,843	2,659	5,502
Total	54,890	53,402	108,292	61,905	60,806	122,711	1,231,434	1,176,132	2,407,566

TABLE 3—Continued

GRADED ENROLLMENT, BY COUNTIES

County	Grade nine in junior high schools			Grade nine in four-year high schools			Grade ten		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Alameda	2,229	2,285	4,514	3,169	3,100	6,269	5,686	5,509	11,195
Alpine									
Amador				81	76	157	73	66	139
Butte	316	320	636	318	334	652	713	637	1,350
Calaveras				79	65	144	83	75	158
Colusa				131	86	217	101	97	198
Contra Costa	1,695	1,533	3,228	1,800	1,709	3,509	3,441	3,312	6,753
Del Norte				145	124	269	132	127	259
El Dorado				224	203	427	201	229	430
Fresno	1,369	1,314	2,683	1,561	1,379	2,940	2,746	2,692	5,438
Glenn				150	124	274	161	131	292
Humboldt	308	270	578	532	532	1,064	784	676	1,460
Imperial				567	516	1,083	503	502	1,005
Inyo				86	75	161	99	99	198
Kern	21	29	50	2,473	2,307	4,780	2,270	2,281	4,551
Kings				442	441	883	408	421	829
Lake				131	83	214	90	102	192
Lassen				133	113	246	108	107	215
Los Angeles	24,711	24,101	48,812	12,260	11,283	23,543	36,913	35,392	72,305
Madera				393	374	767	357	322	679
Marin				849	860	1,709	837	819	1,656
Mariposa				40	34	74	29	28	57
Mendocino	164	138	302	280	279	559	461	410	871
Merced				875	825	1,700	810	740	1,550
Modoc				60	57	117	67	53	120
Mono				15	9	24	13	11	24
Monterey	269	261	530	893	852	1,745	1,022	1,040	2,062
Napa	382	389	771	64	54	118	477	414	891
Nevada	171	130	301				139	125	264
Orange	1,668	1,571	3,239	3,288	3,133	6,421	4,534	4,565	9,099
Placer				492	440	932	437	473	910
Plumas	109	91	200				95	101	196
Riverside	336	327	663	1,799	1,583	3,382	2,117	1,973	4,090
Sacramento	1,915	1,881	3,796	1,407	1,312	2,719	3,492	3,254	6,746
San Benito				132	111	243	107	109	216
San Bernardino	2,086	1,896	3,982	1,674	1,609	3,283	3,580	3,498	7,078
San Deigo	3,950	3,895	7,845	2,406	2,245	4,651	6,289	5,698	11,987
San Francisco	2,836	2,493	5,329	114	126	240	3,374	2,934	6,308
San Joaquin	932	859	1,791	906	837	1,743	1,806	1,720	3,526
San Luis Obispo	186	179	365	363	320	683	543	494	1,037
San Mateo				2,986	2,842	5,828	2,776	2,634	5,410
Santa Barbara	621	626	1,247	455	381	836	1,062	1,013	2,075
Santa Clara	1,249	1,251	2,500	3,292	3,053	6,345	4,264	4,059	8,323
Santa Cruz				579	576	1,155	558	523	1,081
Shasta				495	431	926	533	448	981
Sierra				16	19	35	20	15	35
Siskiyou				332	274	606	288	257	545
Solano	469	492	961	434	447	881	917	857	1,774
Sonoma	744	740	1,484	308	324	632	1,034	993	2,027
Stanislaus				1,296	1,333	2,629	1,295	1,258	2,553
Sutter				266	285	551	270	272	542
Tehama				211	204	415	226	229	455
Trinity				92	65	157	67	70	137
Tulare				1,347	1,317	2,664	1,354	1,229	2,583
Tuolumne				118	114	232	132	113	245
Ventura	362	324	686	981	890	1,871	1,286	1,250	2,536
Yolo				502	461	963	441	374	815
Yuba				264	247	511	218	214	432
Total	49,098	47,395	96,493	54,306	50,873	105,179	101,839	97,044	198,883

TABLE 3—Continued
GRADED ENROLLMENT, BY COUNTIES

County	Grade eleven			Grade twelve			Total, grades nine through twelve		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Alameda	5,142	4,906	10,048	4,108	4,194	8,302	20,334	19,994	40,328
Alpine									
Amador	61	66	127	65	56	121	280	264	544
Butte	641	605	1,246	520	490	1,010	2,508	2,386	4,894
Calaveras	80	73	153	62	58	120	304	271	575
Colusa	117	79	196	101	88	189	450	350	800
Contra Costa	2,971	2,983	5,954	2,532	2,513	5,045	12,439	12,050	24,489
Del Norte	125	132	257	91	85	176	493	468	961
El Dorado	186	199	385	160	151	311	771	782	1,553
Fresno	2,469	2,309	4,778	2,096	1,953	4,049	10,241	9,647	19,888
Glenn	134	157	291	134	115	249	579	527	1,106
Humboldt	695	650	1,345	625	611	1,236	2,944	2,739	5,683
Imperial	430	430	860	371	327	698	1,871	1,775	3,646
Inyo	79	81	160	89	69	158	353	324	677
Kern	2,049	1,997	4,046	1,831	1,713	3,544	8,644	8,327	16,971
Kings	384	361	745	319	321	640	1,553	1,544	3,097
Lake	118	68	186	79	71	150	418	324	742
Lassen	120	90	210	103	95	198	464	405	869
Los Angeles	33,789	32,129	65,918	27,289	28,012	55,301	134,962	130,917	265,879
Madera	293	267	560	225	207	432	1,268	1,170	2,438
Marin	777	763	1,540	647	636	1,283	3,110	3,078	6,188
Mariposa	35	33	68	23	21	44	127	116	243
Mendocino	410	335	745	364	299	663	1,679	1,461	3,140
Merced	639	644	1,283	521	479	1,000	2,845	2,688	5,533
Modoc	55	45	100	39	35	74	221	190	411
Mono	12	6	18	9	9	18	49	35	84
Monterey	965	922	1,887	714	757	1,471	3,863	3,832	7,695
Napa	409	400	809	347	320	667	1,679	1,577	3,256
Nevada	172	130	302	145	129	274	627	514	1,141
Orange	4,108	3,841	7,949	3,073	3,165	6,238	16,671	16,275	32,946
Placer	475	412	887	347	352	699	1,751	1,677	3,428
Plumas	103	101	204	91	81	172	398	374	772
Riverside	1,882	1,787	3,669	1,517	1,462	2,979	7,651	7,132	14,783
Sacramento	3,118	2,987	6,105	2,401	2,450	4,851	12,333	11,884	24,217
San Benito	91	79	170	94	92	186	424	391	815
San Bernardino	3,357	3,090	6,447	2,671	2,480	5,151	13,368	12,573	25,941
San Diego	5,432	5,279	10,711	4,465	4,362	8,827	22,542	21,479	44,021
San Francisco	2,845	2,575	5,420	2,284	2,213	4,497	11,453	10,341	21,794
San Joaquin	1,648	1,594	3,242	1,363	1,311	2,674	6,655	6,321	12,976
San Luis Obispo	484	467	951	405	367	772	1,981	1,827	3,808
San Mateo	2,580	2,650	5,230	2,168	2,211	4,379	10,510	10,337	20,847
Santa Barbara	988	902	1,890	765	715	1,480	3,891	3,637	7,528
Santa Clara	3,824	3,604	7,428	2,943	3,058	6,001	15,572	15,025	30,597
Santa Cruz	584	476	1,060	448	403	851	2,169	1,978	4,147
Shasta	455	447	902	447	386	833	1,930	1,712	3,642
Sierra	31	19	50	21	9	30	88	62	150
Siskiyou	290	266	556	274	221	495	1,184	1,018	2,202
Solano	780	742	1,522	641	611	1,252	3,241	3,149	6,390
Sonoma	1,012	915	1,927	836	810	1,646	3,934	3,782	7,716
Stanislaus	1,198	1,145	2,343	1,001	993	1,994	4,790	4,729	9,519
Sutter	266	247	513	228	202	430	1,030	1,006	2,036
Tehama	225	167	392	195	182	377	857	782	1,639
Trinity	75	51	126	53	44	97	287	230	517
Tulare	1,218	1,058	2,276	975	925	1,900	4,894	4,529	9,423
Tuolumne	122	100	222	96	94	190	466	421	889
Ventura	1,159	1,166	2,325	1,000	876	1,876	4,788	4,506	9,294
Yolo	435	364	799	320	321	641	1,698	1,520	3,218
Yuba	186	182	368	132	138	270	800	781	1,581
Total	92,328	87,573	179,901	74,863	74,348	149,211	372,434	357,233	729,667

TABLE 3—Continued
GRADED ENROLLMENT, BY COUNTIES

County	Grade thirteen						Grade fourteen					
	Full-time			Part-time			Full-time			Part-time		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Alameda	1,431	829	2,260	802	478	1,280	464	218	682	292	130	422
Alpine												
Amador												
Butte												
Calaveras												
Colusa												
Contra Costa	968	564	1,532	650	379	1,029	335	189	524	169	70	239
Del Norte												
El Dorado												
Fresno	1,186	651	1,837	286	148	434	617	287	904	82	42	124
Glenn												
Humboldt												
Imperial	134	85	219	32	16	48	48	16	64	3	4	7
Inyo												
Kern	1,049	606	1,655	278	214	492	500	185	685	121	69	190
Kings												
Lake												
Lassen	58	24	82		2	2	50	11	61			
Los Angeles	16,289	8,996	25,285	9,447	6,778	16,225	9,267	3,887	13,154	3,926	1,838	5,764
Madera												
Marin	306	193	499	8	7	15	152	62	214	5	2	7
Mariposa												
Mendocino												
Merced												
Modoc												
Mono												
Monterey	723	441	1,164	163	117	280	348	158	506	64	39	103
Napa	223	108	331	61	50	111	97	40	137	23	12	35
Nevada												
Orange	2,373	1,279	3,652	697	436	1,133	1,039	486	1,525	308	172	480
Placer	242	117	359	15	9	24	138	73	211	12	4	16
Plumas												
Riverside	559	372	931	189	96	285	145	123	268	45	19	64
Sacramento	1,291	661	1,952	717	291	1,008	559	210	769	336	103	439
San Benito	47	23	70	2	1	3	24	6	30	1		1
San Bernardino	1,448	916	2,364	565	386	951	664	384	1,048	157	112	269
San Diego	1,689	751	2,440	2,045	806	2,851	570	213	783	375	132	507
San Francisco	1,822	881	2,703	506	424	930	1,127	360	1,487	320	118	438
San Joaquin	641	419	1,060	249	150	399	238	168	406	90	59	149
San Luis Obispo												
San Mateo	1,052	543	1,595	224	105	329	409	181	590	127	50	177
Santa Barbara	358	185	543	168	119	287	171	60	231	46	31	77
Santa Clara	1,084	468	1,552	689	313	1,002	530	170	700	343	87	430
Santa Cruz	229	145	374				12	8	20			
Shasta	339	241	580	34	11	45	217	97	314	26	9	35
Sierra												
Siskiyou	40	30	70	2	1	3	2	2	4			
Solano	295	166	461	45	15	60	442	81	523	9		9
Sonoma	535	392	927	194	161	355	243	131	374	50	39	89
Stanislaus	657	391	1,048	159	110	269	395	198	593	167	71	238
Sutter												
Tehama												
Trinity												
Tulare	558	381	939	16	19	35	361	223	584	8	9	17
Tuolumne												
Ventura	511	288	799	1,136	354	1,490	264	95	359	478	192	670
Yolo												
Yuba	331	231	562	135	74	209	158	75	233	16	20	36
Total	38,468	21,377	59,845	19,514	12,070	31,584	19,586	8,397	27,983	7,599	3,433	11,032

TABLE 3—Concluded
GRADED ENROLLMENT, BY COUNTIES

County	Total, grades thirteen and fourteen					
	Full-time			Part-time		
	Male	Female	Total	Male	Female	Total
Alameda	1,895	1,047	2,942	1,094	608	1,702
Alpine						
Amador						
Butte						
Calaveras						
Colusa						
Contra Costa	1,303	753	2,056	819	449	1,268
Del Norte						
El Dorado						
Fresno	1,803	938	2,741	368	190	558
Glenn						
Humboldt						
Imperial	182	101	283	35	20	55
Inyo						
Kern	1,549	791	2,340	399	283	682
Kings						
Lake						
Lassen	108	35	143		2	2
Los Angeles	25,556	12,883	38,439	13,373	8,616	21,989
Madera						
Marin	458	255	713	13	9	22
Mariposa						
Mendocino						
Merced						
Modoc						
Mono						
Monterey	1,071	599	1,670	227	156	383
Napa	320	148	468	84	62	146
Nevada						
Orange	3,412	1,765	5,177	1,005	608	1,613
Placer	380	190	570	27	13	40
Plumas						
Riverside	704	495	1,199	234	115	349
Sacramento	1,850	871	2,721	1,053	394	1,447
San Benito	71	29	100	3	1	4
San Bernardino	2,112	1,300	3,412	722	498	1,220
San Diego	2,259	964	3,223	2,420	938	3,358
San Francisco	2,949	1,241	4,190	826	542	1,368
San Joaquin	879	587	1,466	339	209	548
San Luis Obispo						
San Mateo	1,461	724	2,185	351	155	506
Santa Barbara	529	245	774	214	150	364
Santa Clara	1,614	638	2,252	1,032	400	1,432
Santa Cruz	241	153	394			
Shasta	556	338	894	60	20	80
Sierra						
Siskiyou	42	32	74	2	1	3
Solano	737	247	984	54	15	69
Sonoma	778	523	1,301	244	200	444
Stanislaus	1,052	589	1,641	326	181	507
Sutter						
Tehama						
Trinity						
Tulare	919	604	1,523	24	28	52
Tuolumne						
Ventura	775	383	1,158	1,614	546	2,160
Yolo						
Yuba	489	306	795	151	94	245
Total	58,054	29,774	87,828	27,113	15,503	42,616

TABLE 4

TOTAL GRADED ENROLLMENT, BY COUNTIES, WITH PER CENT OF INCREASE OR DECREASE SINCE OCTOBER 31, 1958

County	Total enrollment, kindergarten and grades one through fourteen, October 31, 1959			Increase or decrease between October 31, 1958 and October 31, 1959	
	Male	Female	Total	Number	Per cent
Alameda	92,151	87,037	179,188	8,344	4.9
Alpine	32	31	63	4	6.8
Amador	1,061	1,032	2,093	112	5.7
Butte	9,117	8,610	17,727	508	3.0
Calaveras	1,133	1,063	2,196	101	4.8
Colusa	1,500	1,330	2,830	33	1.2
Contra Costa	55,905	52,760	108,665	5,134	5.0
Del Norte	2,146	2,030	4,176	284	7.3
El Dorado	3,407	3,288	6,695	1,168	21.1
Fresno	48,949	45,072	94,021	2,045	2.2
Glenn	2,272	2,055	4,327	67	1.6
Humboldt	12,959	12,043	25,002	1,418	6.0
Imperial	8,707	8,323	17,030	152	.9
Inyo	1,456	1,412	2,868	24	.8
Kern	39,195	36,349	75,544	2,364	3.2
Kings	6,695	6,111	12,806	96	.8
Lake	1,436	1,281	2,717	21	.8
Lassen	1,992	1,725	3,717	—111	—2.9
Los Angeles	605,875	569,295	1,175,170	52,147	4.6
Madera	5,485	5,125	10,610	—7	—.1
Marin	15,103	14,253	29,356	2,110	7.7
Mariposa	473	455	928	19	2.1
Mendocino	6,381	5,871	12,252	495	4.2
Merced	11,636	10,884	22,520	807	3.7
Modoc	1,014	987	2,001	—7	—.3
Mono	222	199	421	30	7.7
Monterey	20,876	19,540	40,416	3,055	8.2
Napa	6,824	6,222	13,046	479	3.8
Nevada	2,035	1,837	3,872	146	3.9
Orange	83,677	78,638	162,315	20,590	14.5
Placer	7,305	6,554	13,859	900	6.9
Plumas	1,495	1,413	2,908	—51	—1.7
Riverside	32,959	31,311	64,270	4,396	7.3
Sacramento	58,971	55,150	114,121	10,366	10.0
San Benito	1,759	1,567	3,326	132	4.1
San Bernardino	59,493	55,866	115,359	1,428	1.3
San Diego	106,602	99,491	206,093	20,730	11.2
San Francisco	49,193	43,886	93,079	1,586	1.7
San Joaquin	29,092	27,279	56,371	2,013	3.7
San Luis Obispo	8,347	7,734	16,081	1,209	8.1
San Mateo	49,597	46,903	96,500	5,760	6.3
Santa Barbara	17,447	16,255	33,702	5,583	20.0
Santa Clara	75,987	70,598	146,585	16,790	12.9
Santa Cruz	8,433	7,881	16,314	1,179	7.8
Shasta	8,227	7,365	15,592	856	5.8
Sierra	308	278	586	—6	—1.0
Siskiyou	4,344	4,028	8,372	267	3.3
Solano	15,812	14,473	30,285	1,587	5.5
Sonoma	16,649	15,700	32,349	2,009	6.6
Stanislaus	20,429	18,893	39,322	844	2.2
Sutter	4,007	3,896	7,903	551	7.5
Tehama	3,145	2,932	6,077	273	4.7
Trinity	1,143	1,090	2,233	161	7.8
Tulare	21,766	19,944	41,710	988	2.4
Tuolumne	1,700	1,534	3,234	—3	—.1
Ventura	23,482	20,997	44,479	3,199	7.7
Yolo	7,346	6,926	14,272	730	5.4
Yuba	4,283	3,840	8,123	690	9.3
Total	1,689,035	1,578,642	3,267,677	185,795	6.0

TABLE 5

ENROLLMENT IN SPECIAL CLASSES, BY COUNTIES

County	Ungraded pupils in elementary schools			Postgraduate pupils in elementary schools			Special day and evening classes in elementary schools		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Alameda									
Alpine									
Amador									
Butte									
Calaveras									
Colusa									
Contra Costa									
Del Norte									
El Dorado									
Fresno									
Glenn									
Humboldt							3	1	4
Imperial									
Inyo								1	1
Kern									
Kings									
Lake									
Lassen									
Los Angeles	317	52	369						
Madera									
Marin	12	2	14						
Mariposa									
Mendocino									
Merced	1		1						
Modoc									
Mono									
Monterey							16	7	23
Napa									
Nevada							5	2	7
Orange									
Placer									
Plumas							4	1	5
Riverside									
Sacramento									
San Benito									
San Bernardino									
San Diego	547	187	734						
San Francisco	1	2	3						
San Joaquin									
San Luis Obispo									
San Mateo									
Santa Barbara									
Santa Clara									
Santa Cruz	1		1				11	13	24
Shasta	1		1						
Sierra									
Siskiyou									
Solano									
Sonoma	1	2	3						
Stanislaus									
Sutter									
Tehama									
Trinity									
Tulare	11	5	16				8	3	11
Tuolumne									
Ventura									
Yolo									
Yuba									
Total	892	250	1,142				47	28	75

TABLE 5—Continued
ENROLLMENT IN SPECIAL CLASSES, BY COUNTIES

County	Special classes for physically handicapped minors								
	Elementary schools			Grades seven and eight in junior high schools			High school level		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Alameda	174	124	298	6	6	12	14	69	83
Alpine									
Amador									
Butte	13	8	21		2	2	4	4	8
Calaveras									
Colusa	1		1						
Contra Costa	85	46	131	2	3	5		7	7
Del Norte	2	2	4				1		1
El Dorado									
Fresno	68	54	122	8	8	16	6	19	25
Glenn	1	1	2						
Humboldt	5	15	20	3	1	4	4	2	6
Imperial	23	22	45				1		1
Inyo									
Kern	64	59	123				25	8	33
Kings	13	8	21						
Lake	1		1						
Lassen		3	3					1	1
Los Angeles	1,938	1,427	3 365	121	91	212	394	523	917
Madera	3	2	5						
Marin	20	13	33				4	1	5
Mariposa									
Mendocino	1		1						
Merced	33	16	49					1	1
Modoc									
Mono									
Monterey	2	4	6		1	1	3	3	6
Napa		2	2				5	1	6
Nevada									
Orange	134	120	254	6	4	10	9	18	27
Placer	6	8	14						
Plumas									
Riverside	28	33	61	3	7	10	17	8	25
Sacramento	138	84	222	11	3	14	17	15	32
San Benito									
San Bernardino	109	83	192	9	17	26	30	45	75
San Diego	220	189	409	10	4	14	40	51	91
San Francisco	275	206	481	47	37	84	60	120	180
San Joaquin	60	43	103	1	2	3	2	10	12
San Luis Obispo	6	5	11					1	1
San Mateo	68	60	128				4	10	14
Santa Barbara	19	9	28	2	2	4	4	4	8
Santa Clara	100	92	192	4	4	8	9	15	24
Santa Cruz	7	8	15				8	9	17
Shasta	15	10	25						
Sierra									
Siskiyou		1	1				1		1
Solano	16	11	27	1		1	1		1
Sonoma	29	23	52	3	2	5	4	5	9
Stanislaus	43	26	69				2	2	4
Sutter	1	3	4						
Tehama									
Trinity									
Tulare	45	45	90				41	18	59
Tuolumne									
Ventura	32	40	72	3	3	6	12	8	20
Yolo	1		1					1	1
Yuba	2	3	5						
Total	3,801	2,908	6,709	240	197	437	722	979	1,701

TABLE 5—Continued
ENROLLMENT IN SPECIAL CLASSES, BY COUNTIES

County	Special classes for mentally retarded minors								
	Elementary schools			Grades seven and eight in junior high schools			High school level		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Alameda	709	491	1,200	203	134	337	426	294	720
Alpine									
Amador	8	8	16				11	4	15
Butte	50	28	78	12	10	22	19	9	28
Calaveras	11	2	13						
Colusa	18	9	27						
Contra Costa	285	209	494	39	26	65	44	29	73
Del Norte									
El Dorado	20	12	32				9	5	14
Fresno	257	159	416	54	24	78	36	44	80
Glenn	4	6	10						
Humboldt	83	45	128	14	6	20	37	21	58
Imperial	23	12	35						
Inyo									
Kern	383	221	604				136	64	200
Kings	110	72	182				17	12	29
Lake	6	5	11						
Lassen									
Los Angeles	6,917	4,605	11,522	986	659	1,645	1,173	795	1,968
Madera	45	31	76				7	5	12
Marin	65	35	100				18	6	24
Mariposa									
Mendocino	6	7	13						
Merced	74	60	134	12	4	16	35	9	44
Modoc	10		10						
Mono									
Monterey	217	108	325	15	10	25	41	22	63
Napa	63	30	93	12	7	19	7	2	9
Nevada	9	11	20	1		1	5		5
Orange	555	379	934	34	22	56	159	99	258
Placer	69	33	102				44	21	65
Plumas	9	1	10						
Riverside	304	205	509	64	49	113	87	55	142
Sacramento	553	349	902	127	63	190	227	141	368
San Benito	28	20	48				20	18	38
San Bernardino	571	366	937	138	87	225	195	179	374
San Diego	1,106	720	1,826	345	232	577	401	320	721
San Francisco	317	267	584	220	165	385	332	222	554
San Joaquin	211	163	374	52	50	102	111	80	191
San Luis Obispo	77	37	114				33	22	55
San Mateo	197	125	322				71	39	110
Santa Barbara	90	67	157	20	30	50	42	22	64
Santa Clara	554	320	874	18	12	30	114	94	208
Santa Cruz	98	70	168	8	4	12	37	23	60
Shasta	19	16	35				15	3	18
Sierra									
Siskiyou	9	4	13						
Solano	72	30	102	20	6	26			
Sonoma	87	72	159	38	16	54	40	28	68
Stanislaus	281	191	472				115	39	154
Sutter	16	11	27						
Tehama	16	11	27						
Trinity									
Tulare	245	175	420				66	32	98
Tuolumne	3	7	10						
Ventura	214	124	338	20	17	37	79	49	128
Yolo	63	41	104				24	23	47
Yuba	62	24	86						
Total	15,199	9,994	25,193	2,452	1,633	4,085	4,233	2,830	7,063

TABLE 5—Continued

ENROLLMENT IN SPECIAL CLASSES, BY COUNTIES

County	Compulsory continuation classes			Special pupils					
				High school level			Junior college level		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Alameda	116	49	165	65	54	119	68	61	129
Alpine									
Amador				784	1	785			
Butte									
Calaveras									
Colusa									
Contra Costa	160	104	264				326	132	458
Del Norte									
El Dorado									
Fresno	154	88	242	1		1	115	90	205
Glenn									
Humboldt	9	14	23						
Imperial					1	1	21	15	36
Inyo									
Kern	6	9	15	107	6	113	32	37	69
Kings									
Lake									
Lassen							6	5	11
Los Angeles	1,335	704	2,039	846	734	1,580	2,858	2,558	5,416
Madera									
Marin				5	1	6	25	19	44
Mariposa									
Mendocino									
Merced					3	3			
Modoc									
Mono									
Monterey							103	58	161
Napa							1	12	13
Nevada									
Orange				7	4	11	387	261	648
Placer							6	8	14
Plumas									
Riverside	52	19	71				51	14	65
Sacramento	88	28	116				72	97	169
San Benito							28	13	41
San Bernardino	14	19	33				962	839	1,801
San Diego	409	200	609				326	234	560
San Francisco	255	117	372				63	19	82
San Joaquin	16	9	25	4	51	55	53	35	88
San Luis Obispo				55		55			
San Mateo	1		1		1	1	575	478	1,053
Santa Barbara				1		1	108	162	270
Santa Clara	26	5	31	2	2	4	649	173	822
Santa Cruz	3	2	5	119	6	125			
Shasta							17	22	39
Sierra									
Siskiyou							13	42	55
Solano				40	36	76	9	6	15
Sonoma							70	146	216
Stanislaus	7	6	13	3	1	4	1,732	1,809	3,541
Sutter									
Tehama									
Trinity									
Tulare				75	20	95	101	113	214
Tuolumne					1	1			
Ventura	27	16	43	2	2	4	75	118	193
Yolo									
Yuba							19	9	28
Total	2,678	1,389	4,067	2,116	924	3,040	8,871	7,585	16,456

TABLE 5—Concluded
ENROLLMENT IN SPECIAL CLASSES, BY COUNTIES

County	Adults						Total enrollment in special classes and for adults		
	High school level			Junior college level					
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Alameda	7,671	12,785	20,456	2,187	602	2,789	11,639	14,669	26,308
Alpine									
Amador	30	62	92				833	75	908
Butte	330	595	925				428	656	1,084
Calaveras							11	2	13
Colusa							19	9	28
Contra Costa	3,429	5,612	9,041	2,342	1,353	3,695	6,712	7,521	14,233
Del Norte	60	141	201				63	143	206
El Dorado	56	155	211				85	172	257
Fresno	2,339	3,061	5,400	1,662	814	2,476	4,700	4,361	9,061
Glenn		31	31				5	38	43
Humboldt	268	633	901				423	737	1,160
Imperial	240	607	847	234	190	424	545	848	1,393
Inyo	10	48	58				10	48	58
Kern	1,556	2,695	4,251	1,937	1,572	3,509	4,246	4,672	8,918
Kings	202	250	452				342	342	684
Lake	30	48	78				37	53	90
Lassen	52	98	150	32	48	80	90	155	245
Los Angeles	50,387	93,483	143,870	43,898	34,898	78,796	111,170	140,529	251,699
Madera	89	331	420				144	369	513
Marin	420	786	1,206	738	1,464	2,202	1,307	2,327	3,634
Mariposa									
Mendocino	60	168	228				67	175	242
Merced	809	832	1,641				964	925	1,889
Modoc	14		14				24		24
Mono									
Monterey	1,389	2,572	3,961	1,041	646	1,687	2,827	3,431	6,258
Napa				393	469	862	481	523	1,004
Nevada	1	9	10				16	20	36
Orange	1,789	3,420	5,209	7,384	7,113	14,497	10,469	11,442	21,911
Placer	86	290	376	90	109	199	301	469	770
Plumas	2	20	22				11	21	32
Riverside	1,129	1,876	3,005	137	207	344	1,876	2,474	4,350
Sacramento	1,528	2,035	3,563	2,781	1,771	4,552	5,542	4,586	10,128
San Benito				30	30	60	106	81	187
San Bernardino	2,822	5,824	8,646	4,276	3,365	7,641	9,126	10,824	19,950
San Diego	6,610	15,650	22,260	6,418	1,701	8,119	16,432	19,488	35,920
San Francisco	9,901	15,166	25,067	764	455	1,219	12,234	16,774	29,008
San Joaquin	62	227	289	929	808	1,737	1,502	1,480	2,982
San Luis Obispo	406	665	1,071				577	730	1,307
San Mateo	2,130	4,657	6,787	2,797	3,179	5,976	5,843	8,549	14,392
Santa Barbara				2,731	4,037	6,768	3,017	4,333	7,350
Santa Clara	5,220	10,436	15,656	3,528	2,010	5,538	10,224	13,163	23,387
Santa Cruz	735	879	1,614	238	157	395	1,265	1,171	2,436
Shasta	11	64	75	12	29	41	90	144	234
Sierra									
Siskiyou				116	432	548	139	479	618
Solano	670	1,004	1,674	1,251	1,115	2,366	2,080	2,208	4,288
Sonoma	734	1,080	1,814	1,284	1,838	3,122	2,290	3,212	5,502
Stanislaus	261	498	759	721	563	1,284	3,165	3,135	6,300
Sutter							17	14	31
Tehama	61	190	251				77	201	278
Trinity									
Tulare	575	899	1,474	780	828	1,608	1,947	2,138	4,085
Tuolumne	46	89	135				49	97	146
Ventura	1,188	1,841	3,029	756	838	1,594	2,408	3,056	5,464
Yolo	112	439	551				200	504	704
Yuba				364	402	766	447	438	885
Total	105,520	192,251	297,771	91,851	73,043	164,894	238,622	294,011	532,633

TABLE 6

ENROLLMENT ON HALF-DAY SESSIONS, BY COUNTIES

County	Grades in elementary schools								
	One	Two	Three	Four	Five	Six	Seven	Eight	Total, one through eight
Alameda	1,131	586	366						2,083
Alpine									
Amador									
Butte	273	80							353
Calaveras									
Colusa									
Contra Costa	1,725	1,205	349	111	116				3,506
Del Norte	327	59	60						446
El Dorado	327	319	296	193	168	173	163	170	1,809
Fresno	574	238	109						921
Glenn									
Humboldt	507	369							876
Imperial	387	162							549
Inyo									
Kern	336	252	131						719
Kings	30								30
Lake									
Lassen									
Los Angeles	17,383	11,744	6,958	2,522	1,531	1,258	338	111	41,845
Madera									
Marin									
Mariposa									
Mendocino	22								22
Merced	93	67							160
Modoc									
Mono									
Monterey	807	622	268	250	111	109			2,167
Napa	311	224	137	100	87	92			951
Nevada									
Orange	2,886	1,916	1,086	386	394	313	672	669	8,322
Placer									
Plumas									
Riverside	1,114	859	674						2,647
Sacramento	2,839	2,298	1,566	182	131	95			7,111
San Benito									
San Bernardino	789	860	781						2,430
San Diego	2,102	1,731	1,041	207	97	99	96	80	5,453
San Francisco									
San Joaquin	632	388	291		128	105	116	104	1,764
San Luis Obispo	84	45							129
San Mateo	2,228	1,762	1,231	176	154	108			5,659
Santa Barbara	1,171	518	262	277	234	246			2,708
Santa Clara	4,277	3,308	1,483	314	263	79	72	51	9,847
Santa Cruz	140	70	70						280
Shasta	99	102	56						257
Sierra									
Siskiyou									
Solano	207								207
Sonoma	587	573	154			114	107	89	1,624
Stanislaus	483	423	300	179	122	280			1,787
Sutter	339	36	31	15					421
Tehama									
Trinity	63	60	57	9	4	6	6	6	211
Tulare									
Tuolumne									
Ventura	425	80	94	94	67	79			839
Yolo	215	158	185						558
Yuba									
Total	44,913	31,114	18 036	5,015	3,607	3,156	1,570	1,280	108,691

TABLE 6—Concluded
ENROLLMENT ON HALF-DAY SESSIONS, BY COUNTIES

County	Grades in high schools								
	Junior high school								
	Seven	Eight	Nine	Nine	Ten	Eleven	Twelve	Total, seven through twelve	Total, one through twelve
Alameda									2,083
Alpine									
Amador									
Butte	144	112	144		129	94	114	737	1,090
Calaveras									
Colusa									
Contra Costa									3,506
Del Norte									446
El Dorado				118	121	116	86	441	2,250
Fresno									921
Glenn									
Humboldt									876
Imperial									549
Inyo									
Kern									719
Kings									30
Lake									
Lassen									
Los Angeles				756	882	654	316	2,608	44,453
Madera									
Marin									
Mariposa									
Mendocino									22
Merced									160
Modoc									
Mono									
Monterey				342	801	763	626	2,532	4,699
Napa									951
Nevada									
Orange	1,441							1,441	9,763
Placer									
Plumas									
Riverside									2,647
Sacramento									7,111
San Benito									
San Bernardino									2,430
San Diego									5,453
San Francisco									
San Joaquin									1,764
San Luis Obispo									129
San Mateo									5,659
Santa Barbara	260	241	194		318	248	160	1,421	4,129
Santa Clara									9,847
Santa Cruz									280
Shasta									257
Sierra									
Siskiyou									
Solano	1,174							1,174	1,381
Sonoma									1,624
Stanislaus									1,787
Sutter									421
Tehama									
Trinity									211
Tulare									
Tuolumne									
Ventura									839
Yolo									558
Yuba									
Total	3,019	353	338	1,216	2,251	1,875	1,302	10,354	119,045

The addresses summarized in this issue of *California Schools* are the fourth of a series of addresses which were presented at a workshop on foreign language instruction held at the University of California, Santa Barbara College, June 29 through July 2, 1959. The workshop was planned and conducted by the Bureau of Secondary Education, which was assisted by the bureaus of National Defense Education Act Administration and Audio-Visual Education, of the California State Department of Education. The workshop was held to assist administrators and supervisors of school districts and offices of county superintendents of schools to find ways to improve the teaching and increase the number and extent of courses in foreign language in California secondary schools.

RELATIONSHIPS BETWEEN DEVELOPMENT OF LANGUAGE SKILLS AND CULTURAL ATTITUDES

CHARLES F. HOCKETT, *Professor of Linguistics, Cornell University*

We will claim in this discussion that the systematic study of a second language is beneficial for the individual. Let us underscore here that the basis for this claim is not any obvious cultural advantage in bilingualism as such. It is sometimes held that bilingualism or polyglottism affords more windows on the universe or more perspective on reality and that for these reasons the acquisition of a second language is important. But knowing more than one language is extremely common—thousands of people have learned two or more languages simultaneously in early childhood. There is no clear evidence that such people are better off than those who speak only one language. No Great Man, so far as I know, has ever proclaimed: "all that I am I owe to my bilingual background." What is more likely—and this is the theory for which we shall argue—is that the learning of a foreign language after one has mastered one's native language can afford the learner cultural insights that are of potentially great value to him whatever his walk of life.

The term "culture" has already been referred to in this discussion. Almost everyone knows that this word has two rather different meanings, one broader than the other. When we speak of a "cultured individual," we refer to those artistic, educational, and humanistic qualities that are strongly valued in our society. The anthropologist's use of "culture," on the other hand, refers to everything that human beings are or do, or think as a result of their living in society with others. The anthropologist's definition of the term is much broader than the tradi-

tional or "snob" definition, and yet it includes everything covered by the term in the latter sense. For the purposes being considered here, it is the anthropologist's definition of the term that we need. It is in connection with this very broad definition that such phrases as "cultural relativism," "cross-cultural understanding," and "culture shock" have arisen—and these phrases are of importance to us.

First let us consider culture shock. Many an American has gone to, say, Mexico, and has found a plethora of differences, many of them very subtle, between Mexican and American ways of life. The total result is often one of considerable discomfort, most typically without any clear recognition of the reason. It is this discomfort that we define as "culture shock." Advance preparation for residence in a different society can cushion this sort of shock, but even the best-trained and most empathic anthropologist, schooled in the Spanish language, is likely to manifest the syndrome to some extent.

Culture shock is based on cultural differences. We do not have to move from one society to another in order to be affected by it. There are many subtle cultural differences between region and region, or even between family and family, within our own society. Cultural diversity, and hence culture shock, like charity, begins at home. There is always culture shock in marriage—even if one marries the girl next door, as the experts recommend. For example, suppose the husband compresses the toothpaste tube by rolling it from the bottom end, while the wife squeezes it flat. Suppose one spouse prefers bedcovers tucked firmly in at the bottom, while the other prefers them lying loose. Tiny and seemingly trivial divergencies like these can reverberate to produce catastrophic consequences, and often do. Even within our own society, it would seem that the natural basis for culture shock is something about which we need orientation and preparation as we grow up.

There are also cultural differences between societies that are subtle and easily overlooked, yet capable of causing significant ramifications in the attitudes people develop towards one another. Most Americans, if they stand and talk face to face, are at least at arm's length from each other. Latin Americans have a different habit: they can comfortably stand eight to ten inches from each other, face to face. Conversation, while standing, between a Latin American and an American often produces a slow chase, the American backing up as the Latin American approaches, until the former's back is to a wall and there is nothing more he can do. If we are unaware of what is happening in such a situation, we are apt to conclude that the Latin American is obnoxious, without knowing why. If we are aware of the difference of habit, we may still have the emotional tendency to react to the Latin American's "obnoxiousness"—but at least, we can realize that there are doubtless dozens of subtle differences by virtue of which we impress others as

being equally obnoxious, and from this realization can grow the attitude of cross-cultural relativism and understanding that so clearly needs to be sought.

What has all this to do with language teaching? A great deal. Let us posit that language learning without culture is sterile, while cross-cultural study without language learning is blind. Then let us proclaim the "doctrine of immanence": the use of language is an immediate and intimate matter between two or among a few people who are in one another's immediate vicinity as they speak, and who not only hear one another, but also see, smell, and occasionally touch one another. The whole activity is the transaction: the speech that takes place is just one segment of it—an absolutely essential and typically human segment, but nevertheless only part of the whole. All other uses of language, and of substitutes for language (such as writing), stem in one way or another from this basic, intimate use and are influenced thereby.

The teaching of a language should be marked by this same intimacy, this same immediacy, this same immanence. The relationship between language teacher and language learner needs to approach, in its degree of rapport, the kind of relationship striven for by a psychiatrist and a patient in psychotherapy. Perhaps such an ideal is impossible of attainment, but it is not impossible to seek.

We can organize and streamline the actual language materials to be used in teaching a particular foreign language; we can organize them on the basis of careful comparisons between the language to be learned and the native language of the learners; we can use all our special skills and techniques for this, and improve the effectiveness of language teaching by so doing. But inevitably there are subtleties of the language itself or of its immediate cultural context that are overlooked as we try this expert analysis and arrangement. These subtleties are important. The good teacher exposes the learner to them without even knowing that he or she is doing it. This is perhaps the main reason for our emphasis on intimacy in the language teaching relationship.

Here is a simple example, from English, of nonlinguistic factors that are easily overlooked. English pronunciation involves several degrees of stress or prominence. As we speak, almost every primary stress is underscored by a slight motion of head, of hand, of eyebrow, or of arm. The learner of English as a foreign language is exposed to this, and will often acquire it. French body motion—the typical subtle motion that accompanies the speaking of French—is not the same as English body motion; it cannot be, since French does not have the same setup of levels of stress that English does. Immediacy in the language learning context means that the learner is given the optimum chance to learn not just to speak French, but to enact it as the French do.

In the face of these considerations, we must strongly resist the constant tendency to depersonalize language teaching. Tape recordings, films, and television are in part like radio and telephone, all of which are like the use of writing in that they supposedly bring people together when they are really devices for keeping people apart. Films and television are particularly deceptive on this score because we see and hear a speaker or actor who may be very skillful in deluding us into thinking that he is aware of us; but actually there is no direct feedback from us to him—no immediacy at all. As language teachers, therefore, we must be eternally vigilant about mechanical aids. We can use them to help us with certain parts of the whole enterprise, but they should not be used to take over our own tasks. We must insist always on the maintenance of the direct person-to-person contact in language teaching. Improved language teaching does not in any way depend on the use of expensive mechanical equipment even though it is nice to have such equipment around for the subsidiary functions which it can perform.

The elementary language class is one of the best contexts we have anywhere in the formal educational system for the imbuing of people with attitudes of cultural relativism, flexibility, and tolerance. The importance of cultural flexibility can be based merely on the grounds that cultural differences will be with us indefinitely. Therefore, we have to learn to live with them. More positively, we can point out that different cultures show, in some cases, better solutions than our own for common problems. Stubborn provincialism sometimes prevents us from making use of such knowledge. Unless we really learn to live in the midst of cultural differences, we may, as a whole species, find it impossible to go on living at all.

This conference is in part supported by Federal funds, under the provisions of the National Defense Education Act. It behooves us, therefore, to think a bit about language teaching in connection with the national interest.

We can easily say that it is to the national interest for us to have a constantly replenished minimum stock of people who actively and fluently utilize certain foreign languages—so many for Spanish, so many for Hindustani, and so on. This is a bit like the policy of certain fishes: the ling, a relative of the cod, lays in the course of a lifetime some 28,000,000 eggs as a way of guaranteeing that at least two of them will survive the vicissitudes of early life and grow to adulthood. Just so, we could flatly insist on exposing every young American to one or another language through many years of his schooling, in the hope that the rate of mortality would be sufficiently low to maintain the necessary minimum stock for the national interest.

This way of thinking replaces people by numbers, and impresses us as thoroughly cold. Of course, it is not wrong to think in these terms—

in some contexts it is necessary. So long as we are thinking this way for a moment, let us recognize that the teaching of foreign languages in the schools and colleges is by no means the only procedure by which minimum stocks can be maintained. There are millions of American citizens who speak Spanish; there are tens of thousands, perhaps millions, who speak Italian; and so on. Our traditional melting-pot policy has tended to conceal this from us. We need, perhaps, to turn the fire off under the pot, and modify our national character to the point of glorying in our heterogeneous cultural heritage instead of tending to make second and third generation hyphenated Americans a bit ashamed of their backgrounds. There are many reasons for this recommendation—the national interest, viewed statistically, is merely one.

The notion of "national interest" needs to be dissected more carefully. The real, ultimate, national interest of this country is to satisfy the needs and interests of the people who comprise the country. We must think not merely in terms of the secondary schools of California, nor of Miss Jones' second-year French class, but specifically in terms of Johnny Williams and Mary Alcalde and Archibald Chang. We have an almost impossible task: while aiming toward the sort of language classes that will produce individuals fluent in the use of various foreign languages, at the same time we must organize the ongoing activities of the classroom so that Johnny, if he drops out of school two months, two weeks, or two years from now, will have had a useful and enlightening experience. He should be at least slightly better equipped to get along in a culturally diverse community and a culturally heterogeneous world than he was before we worked with him. After all, the dream of American education, of our nation, is that every human being shall be enabled to live in as large a world as his own potentialities allow. *This* is the national interest. Statistical thinking should serve this interest.

We language teachers have a comforting axiom on our side: it is impossible to do harm by opening up better channels of communication among people. In the nature of things, there can be no "military secrets" in our trade. We can as freely offer our services and skills to those with whom we disagree as to those whose opinions we approve. If the Russians wish to learn from us about effective techniques in language teaching—as, indeed, we should be learning from them—well and good. In the last analysis it is not our business to choose what information will be transmitted through the channels we establish, but we do not have to worry about this if we do our own task well, since improved conditions for face-to-face communication among people are not contrived to help them deceive one another. Ours is a high calling, worthy of the best that we can find in ourselves.

MEANS FOR EVALUATION OF LANGUAGE LEARNING

KARL E. SCHEVILL, *Supervisor of Teaching of Foreign Languages, University of California, Berkeley*

Let me ask those of you at the secondary level who have firsthand knowledge of your language departments: What kind of a program in foreign language instruction do *you* have? In view of what we know about learning and the learning process, and our knowledge of national needs, are you offering a kind of language instruction designed for college students, one that is not even remotely appropriate for high school boys and girls? Who designed your language program? What are its basic purposes? Is it accomplishing what it should accomplish?

In all but one of the areas of our secondary school curriculum we have made regular and consistent efforts to examine, to adapt, and to revise educational programs to meet the changing needs of boys and girls. The one area in which we have failed to put forth such effort is that of foreign language.

I wish to make a special plea to the colleges and universities that they accept a major share of the responsibility for co-ordinated action that will lead to improvement in foreign language instruction. They can do more to promote understanding and to develop unity of purpose in this field than any other group. In the minds of the high school teachers there is no doubt that college standards and requirements have determined the kind of language program that is presently in existence. It is my belief that the present system of foreign language instruction, which I see in high schools and in the lower divisions of certain institutions of higher education, is unsound and ill-suited to our national needs. There is no basic agreement on the purposes and objectives of our foreign language programs. It is our job to clarify what we are asking the language teachers to do, decide how it can best be done, and establish the means by which the program can be evaluated.

Let us look at what is happening in the light of recent developments. In the last few years two forces, each opposing the other, have been at work. First, there have been attempts to replace a liberal education with general education, meaning a movement toward utilitarianism and functionalism. This force continues to oppose the inclusion of foreign language instruction in the curriculum. Secondly, the responsibility of the United States to participate in world affairs, and a recognition of the need for improved international understanding through knowledge of others and the ability to speak their language make the need for a much more comprehensive program of foreign language instruction strongly felt. The remarkable development of language programs at the

elementary school level is convincing evidence of change. Recently there has been an increasing number of colleges and universities which have either restored or strengthened their language requirements for admission and for graduation. The College of Letters and Science of the University of California, Berkeley, has established for the fall of 1959, proficiency examinations for all entering freshmen who wish to continue studying the language they studied in high school. The student who achieves the level of proficiency desired by the College of Letters and Science of the University will no longer be required to take additional courses in foreign language for graduation. The University of San Francisco has changed its foreign language requirement to a general proficiency requirement which includes the ability to understand and to speak a foreign language. This change has been made possible by the opening of its 60-station electronic language laboratory. Enrollment in foreign language classes is everywhere on the increase, with a per cent of growth consistently greater than that of the total school population.

The *Report on Foreign Language Teaching in Illinois*, of the Allerton House Conference on Education, released in April, 1957, points out the three most important changes that are taking place in language teaching. The basic goal, the report says, has become "the teaching of the ability to understand and to speak the foreign language, an objective which supersedes, but does not replace, the reading aim of former years." The second purpose is to "increase the contribution of language study to general education," a recognition of the importance of the cultural objective. The third is the use of "modern linguistic and audio-visual aids to achieve a more economical and less technical approach in language teaching." The report states: "present day foreign language teaching cannot be appraised in terms of what it was ten, fifteen, or twenty years ago. Most of the criticisms which were at one time directed against objectives or methods are no longer applicable to schools in which the teaching of languages has received a reasonable amount of support, guidance, and encouragement." However, the same perplexing problems are still in existence for all concerned.

Certain facts, looked at historically, may suggest that some over-all changes are needed. For more than 40 years educational theorists have attacked the claims of the foreign language proponents that the study of foreign language should have an essential place in the secondary school curriculum. In 1910, more than 90 per cent of the high school students studied a foreign language; in 1922, 63 per cent; in 1934, 44 per cent; and in 1950, 21 per cent. As language study was replaced by study in other courses, colleges in their competition for students, were forced to eliminate foreign language entrance barriers and to undertake the elementary foreign language study that belongs properly in the secondary

schools. Historical perspective now shows us the inevitable results. Foreign language study had to be eliminated completely as a requirement for a college degree or had to be taught in secondary schools solely as a college preparatory subject. Along with this seemingly insoluble problem the schools and colleges of the nation stubbornly refused to accept the simple, long recognized fact that language study should be started early, and should be continued long enough to provide each child the opportunity to acquire the language proficiency commensurate with his ability that would provide him with some measure of value. We still persist in offering in the high school a kind of language instruction that is suited to college use but inappropriate for high school use in light of what we know about boys' and girls' ability to learn, and because it is not sufficiently productive in view of what we know to be our national needs.

Quite clearly, the root of this problem does not lie in the secondary schools but in the influential shadow cast by institutions of higher learning. Because high school teachers teach a college program, they find it difficult, if not impossible, to avoid placing a heavy reliance on an academic system of rating students' work. This system has worked so well that letter grades in foreign languages from accredited high schools in the State of California are considered by the University of California, purely as a matter of statistics, to be one of the most accurate measuring devices known in the prediction of a student's academic success in the University. Indeed, far better than an IQ score!

Perhaps the moves by some institutions of higher learning to use proficiency examinations to determine whether students meet entrance requirements and have good chances for success in doing work at the college level are steps in the right direction. But I think we have the responsibility to withhold any judgment until we see whether the examinations will measure the things which are truly significant in the language learning process.

With these thoughts as background, let us consider in more detail the question of evaluation. We must all agree first on our purposes and objectives. It is my belief that we must have some reasonable means by which to appraise our system of language instruction. No one presently can guarantee with objective certainty that all the time, effort and money now being expended will produce for us a far better language program unless we have a properly constructed evaluation system. Let's discuss then what evaluation may or may not mean for many of us. If you ask a language teacher to define his system of evaluation he will generally equate it with his means of rating or testing his students.

The base on which evaluation must be built is the program of instruction. An evaluation system that can determine the importance and value of the instructional program in some objective and reliable fashion may

convince the language teacher that a change from the traditional approach to evaluation is necessary and desirable. Even though he has no comprehensive evaluation criteria to guide him in his work, the language teacher generally has a sense of responsibility for making some academic standard. His system of evaluation, therefore, is limited to the use of written test results. The foreign language teacher has not been inclined to look on evaluation as it should be and could be: a continuous and comprehensive appraisal of students' progress. Tests invariably become standards of achievement and in fact dictate what students will attempt to learn. In my opinion, a test is the most important teaching device that can be used in the foreign language program, but not necessarily the best device for evaluating student learnings.

What impact will new laboratory equipment have on our system of language instruction? Is our present system one that we wish to continue? What happens when you offer teachers broad horizons and the physical means to do something very different in their method of instruction, and yet fail at the same time to take into account the basic need for continual encouragement, support, and help?

The basic question is whether or not an acceptable standard of language performance for secondary school students, based on a program of instruction designed specifically for them, can be determined and developed for practical use. A group of us have been actively working on this problem for a number of months. We had hoped to be able to develop a project that would be acceptable under one or more of the titles of the National Defense Education Administration Act. And while we were discouraged that our project was not immediately acceptable, we are not going to discontinue our efforts to secure acceptance.

The discussions in this working group led us to the conclusion that we needed an evaluation instrument or series of evaluation of instruments to be administered, without thought of rating, to as many beginning foreign language students as would constitute a reasonable sample, at regular intervals over a minimum of four years.

The evaluation scale is conceived of as a sliding scale—a multipart, informational, and progress-measuring instrument, to consist of 30 films of 20 minutes each, to be used at regular intervals during the school year, with the necessary test booklets and scoring sheets.

These test items will require appropriate responses showing a pupil's progress in understanding, speaking, reading, writing, and acquiring of factual information.

This is an exploratory-descriptive study—the first year of a projected four-year study—the principal purpose of which is to measure progress on a broad scale in the teaching and learning of Spanish in the areas of understanding, speaking, reading, writing, and culture in a four-year

Spanish program in a cross-section of Bay Area high schools. It will also involve a study of motivational factors in the learning situation, and an analysis and identification of those elements which contribute most to the desired mastery of a foreign language.

Rather than attempt to prove a specific thesis with controlled and experimental groups, this is an attempt to examine the teaching of Spanish and in doing so endeavor to identify those factors found to contribute importantly to the learning of Spanish.

The second purpose of this study is to identify the variables in teaching situations which may be accepted as clues to more specific study in the second and ensuing years. We are interested in developing schemes for determining motivational elements in the project classrooms, investigating behavioral and attitudinal changes among pupils in the program, and the like.

Departmental Communications

DIVISION OF PUBLIC SCHOOL ADMINISTRATION

WALLACE W. HALL, *Chief*

FIRE SAFETY PRECAUTIONS URGED IN SELECTION OF SCHOOL BAND UNIFORMS

The State Fire Marshal has warned that certain inflammable materials are being used by some manufacturers of band uniforms and hats. The colorful, decorative plastics that are most spectacular and therefore popular with school band members, may contain nitrocellulose, which burns with extreme intensity and with a flame that is very difficult to extinguish. This material has been used in the manufacture of shako type hats and in the decoration of uniforms.

The Flammable Wearing Apparel Act (Health and Safety Code sections 19810 *et seq.*), does not cover such articles as hats and similar accessories. However, they may be a definite civil liability in the event of a fire involving band uniform hats.

The extremely dangerous properties of nitrocellulose plastic are well known to members of the fire service. There seems to be slight possibility of an accidental fire while band uniform hats containing such material are being worn outdoors, but a hazardous condition might develop on a school bus. It is also important to know that this material decomposes with age and becomes more subject to ignition when stored, as school band uniforms are apt to be, during hot summer months.

Educators and administrators should make certain that band hats decorated with nitrocellulose plastics are not used by their school bands and that band hats thus decorated are not stored.

BUREAU OF TEXTBOOKS AND PUBLICATIONS

IVAN R. WATERMAN, *Chief*

RECENT PUBLICATIONS OF THE DEPARTMENT OF EDUCATION

Education of Mentally Retarded Minors in the Public Schools of California. Compiled and prepared by Flora M. Daly and Robert A. Henderson, Consultants in Education of the Mentally Retarded, Bureau

of Special Education, California State Department of Education. Bulletin of the California State Department of Education, Vol. XXVIII, No. 8, October, 1959. Pp. viii + 72.

This bulletin is the second revision of the 1950 publication, *Questions on the Education of Mentally Retarded Minors in California*, revised first in 1955 under the title, *Information Regarding the Education of Mentally Retarded Minors in California*. The authors have brought the information in this bulletin up to date so that administrators, supervisors, teachers, and those engaged in teacher preparation, may find it a convenient reference and guidebook. In addition to chapters on provisions for the mentally retarded, general questions related to the education of mentally retarded minors, and special training classes for educable and for severely mentally retarded minors, there is an extensive list of selected references.

Copies have been distributed to county, city, and district superintendents of schools, to high school principals in districts not employing superintendents, and to selected personnel. The price is 50 cents per copy plus sales tax on California orders.

For Your Information

STATE BOARD OF EDUCATION ACTIONS

The following actions were taken by the State Board of Education at its regular meeting held in Sacramento, December 10 and 11, 1959.

Approval of Change in School District Organization

In accordance with the provisions of Chapter 9, Division 5 of the Education Code (Section 3151), the Board approved the following proposal regarding a change in school district organization:

Formation of a unified school district in Glenn and Colusa counties—A proposal by the augmented Glenn County Committee on School District Organization to determine whether the voters in the Elk Creek Union and Fruto elementary school districts, both in Glenn County, and the Indian Valley Joint Elementary School District, lying within the counties of Glenn and Colusa, wish to form a unified school district.

Changes in Rules and Regulations

Cumulative Record. The Board, acting under the authority of Education Code Section 10752, added Article 9.1 (Sections 80 to 80.3, inclusive), to Subchapter 1 of Chapter 1 of Title 5 of the California Administrative Code, relating to cumulative record, to read as follows (effective January 14, 1960):

Article 9.1. Cumulative Record

80. *Definition.* (a) A cumulative record is a history of a pupil's development and educational progress maintained for the purpose of providing the best possible conditions for his education.

(b) For the purposes of Section 10752 of the Education Code, the recorded information should be similar to that provided for by the form known as the California Cumulative Record.

(c) If items of information that are required by Section 79 (a) to be kept permanently in the school are recorded on separate forms, such items shall either be entered on the cumulative record or a duplicate copy thereof shall be attached to the cumulative record whenever it is transferred.

80.1. *Requirement.* A cumulative record shall be maintained for each pupil in the public schools of California subsequent to July 1, 1960.

80.2. *Transfer of Record.* In the event of a pupil's transfer to another school district within this State and upon the request of that district, the cumulative record, or a copy thereof, with entries brought up to date shall be forwarded promptly by United States mail or other responsible agency.

80.3. *Inspection of Records.* During consultation between a certificated employee of a school district and a parent of a pupil, the cumulative record of that pupil may be made available to his parent for inspection.

Acceptance of Credit Earned in State Colleges. The Board, acting under the authority of Education Code Section 152, amended Section 846 of Title 5 of the California Administrative Code, relating to accept-

ance of credit earned in state colleges, to read as follows (effective January 14, 1960):

846. *Acceptance of Credit Earned in State Colleges.* Appropriate undergraduate and postgraduate credit earned in any state college heretofore or hereafter established, may be accepted in fulfillment of requirements for credentials.

Attendance Accounting in Work Experience Classes. The Board, acting under the authority of Education Code Section 152, and implementing Section 11251 of the Education Code, added Section 10.1 to Title 5 of the California Administrative Code, relating to the counting of attendance, to read as follows (effective January 14, 1960):

10.1. *Attendance Accounting in Work Experience Classes.* (a) In work experience, nursing, Institution-on-Farm, and other classes of a similar type which are conducted by high schools and junior colleges and which as a part of the course provide experiences in actual working situations outside a classroom and largely under the supervision of someone other than a certificated employee of the district, no attendance for a pupil may be counted except for that time during which a certificated employee of the district, charged with supervision of the program, is in the proximate presence of the pupil. Such attendance shall be counted in accordance with the provisions of subsection (d) or (i) or both of Section 9 of this title.

(b) For the purposes of this section, "proximate presence" means that the certificated employee charged with supervision of the program is present in the building, facility, or area where experiences in actual working situations are conducted.

Requirement for Purchase of Meals at State College Eating Facilities. The Board, acting under the authority of Education Code Section 23604, added Article 3.5 (Sections 952 and 952.1) to Group 5 of Subchapter 4 of Chapter 1 of Title 5 of the California Administrative Code, relating to the purchase of meals at state college eating facilities, to read as follows (effective January 14, 1960):

Article 3.5. Eating Facilities

952. *Determination of Availability.* A president of a state college may determine that eating facilities on the campus of a state college are adequate to accommodate students for breakfast, lunch, or dinner, or any combination thereof as specified in the determination as follows:

(a) All students who will be licensed to live in residence halls on that campus during an academic semester or academic quarter, or

(b) Any group or groups of such residence hall students, as for instance Freshmen, designated in the determination.

952.1. *Required Purchase of Meals.* After a president gives writen notice to the Director of Education that he has made such a determination and that the best interests of the college and of the designated students will be served by the following requirement: all students included in the determination shall purchase all of the meals designated in the notice at those eating facilities on the campus specified by the president. If a student shows good cause, the president or his authorized representative may excuse the student from purchasing meals at college facilities on the campus. Payment shall be made in advance by the semester or quarter, or by installments in advance as determined by the college.

Revocation of Credentials for Public School Service

The Board revoked the credentials, life diplomas, and other documents for public school service heretofore issued to the following persons, effective on the dates shown:

Name	Date of birth	Revocation effective	By authority of Education Code Section
Bryant, Francis Richard	1-21-31	December 11, 1959	13207
Broadway, David Lincoln	1-24-29	December 11, 1959	13207
Dimmitt, Richard Bertrand	8-22-25	December 11, 1959	13207
Dorfer, Stanley Irven	2-25-21	December 11, 1959	13207
Jones, Ernest Herschel	6- 5-11	December 11, 1959	13202
Lowry, Leonard Louie	10-20-14	December 11, 1959	13129 (c) 13202

Granting of Credentials to Applicant Whose Previous Credentials Had Been Revoked

The Board approved the granting, subsequent to previous revocation, of a junior high school credential to Martha Bell Slack McBeth (birth date 6-2-20), provided that current academic requirements are met.

CALENDAR OF EDUCATIONAL MEETINGS AND EVENTS

A master calendar of educational meetings and events of state-wide or regional significance is maintained in the office of the Superintendent of Public Instruction. The principal list of events for 1959-60 appeared in the September, 1959 issue of *California Schools*. Notices that are not received at the time of publication of this list are published as they are received.

Date, 1960	Organization and event	Place
March 31 to April 2	California Council on Teacher Education, Spring Conference	Miramar Hotel, Santa Barbara

KIMBER AWARDS IN MUSIC, 1960

A gold medal and prize of $3,000 will be awarded May 27, 1960, to a California boy or girl for proficiency in playing the violin, viola, or cello. The purpose of the award, established in 1951, by John E. Kimber, President of Kimber Farms, Inc., Niles, California, is to assist gifted young Californians in obtaining advanced musical education.

Any boy or girl under nineteen years of age on March 1, 1960, who has been a resident of California for six months prior to that date is eligible to compete. Semifinalists will be selected after tryouts at various junior music festivals of local branches of the California Federation of Music Clubs. The final competition will be open to the public on Friday evening, May 27, 1960, in Hertz Hall, University of California, Berkeley. David D. Boyden, Chairman of the Department of Music at the University, will preside.

Those interested in competing for the Kimber Award are urged to apply immediately for information about entering the junior festivals of the California Federation of Music Clubs. Such requests should be addressed to one of the three junior festivals chairmen: Louise C.

Campanari, 2042 Vallejo Street, San Francisco 23, California (Northern District); Mrs. Ralph Melikian, 1099 West San Bruno, Fresno 5, California (Central District); or, Mrs. Glen E. Turner, 1431 South Ellsmere Avenue, Los Angeles 19, California (Southern District).

WEST COAST OFFICE TO ADMINISTER NATIONAL DEFENSE EDUCATION ACT FUNDS FOR HIGHER EDUCATION NEEDS

The U.S. Office of Education has established a West Coast Regional Office to serve higher education in the West Coast states in programs under the National Defense Education Act of 1958. The Act provides loan funds for capable college students who have a need for additional funds to finance their college expenses. Programs included in the higher education field are student loans, graduate fellowships, guidance and training institutes, and foreign language development.

The Regional Representative is Robert E. McConnell. Dr. McConnell will be available for conferences with college officials, high school guidance officers and high school principals regarding the various programs offered. Prospective college students and college students may secure information regarding student loans by writing to the Regional Representative in Higher Education, 447 Federal Office Building, San Francisco 2, California.

SCHOOLROOM PROGRESS U.S.A.

"Schoolroom Progress U.S.A.," a traveling public exhibition illustrating the development of American schoolrooms from the era of quill pens and whale oil lamps to the present, will begin its first visit to California during February after a nationwide tour in which it has been seen by several million school children and adults.

The exhibition, which fills two special railway cars, was produced by the Henry Ford Museum and Geenfield Village at Dearborn, Michigan, and the Encyclopedia Americana. Its threefold purpose is to pay tribute to the role of the teacher in American life, encourage young people to enter the teaching profession, and increase public interest in schools and school facilities. The "old" car contains split log benches, a pot-bellied stove, McGuffey readers, and other authentic materials from the museum at Dearborn. Five modern rooms in the "new" car were designed by outstanding architects of the nation, including two San Franciscans and one Los Angeles firm.

Under sponsorship of Pacific Gas and Electric Company the train will be in Sacramento, February 11-15, Stockton February 18-22, Oakland February 24-29, San Francisco March 2-7, San Jose March 10-14, and Fresno March 16-20, after which it will visit Southern California. School administrations will be given details locally by the sponsors.

CONSERVATION WEEK, 1960

The twenty-sixth annual observance of Conservation Week in California will be March 7 to 14, 1960. Now is the time for school districts to inventory their courses of instruction in the conservation of natural resources and carefully note positive achievements as well as existing barriers to further progress.

The current emphasis upon the improvement of education in science, mathematics, and modern foreign language does not in any way relegate conservation education to a lesser priority. It is encouraging to note that several school districts have included conservation instruction within the framework of science projects developed through funds made available by the National Defense Education Act of 1958.

Man now stands at the threshold of space exploration. It is therefore fitting and proper that we should witness a rennaissance in the fields of science and mathematics in our public schools. However, we need constantly to bear in mind that the earth and its resources form the base from which man in space will be sustained for many decades to come. Until such time as space exploration will reveal hitherto unknown resources "storehouses," we must wisely manage and carefully use our present terrestial resources if we are to continue our present high standard of living, and at the same time materially support a sound program of space exploration.

Here in California, where several industries engaged in producing the hardware for missiles and projected space vehicles are located, the full development and proper distribution of our water resources head our priority list of problems. In view of this and the fact that the citizens of California will be asked to vote for a $1,750,000,000 water bond proposal in the 1960 general election, it is appropriate that school districts should give increased attention to the subject of water resources in presently organized courses of instruction in conservation.

We may well keep this in mind as we prepare to observe Conservation Week. In advance of this week, schools will receive the annual Governor's Message together with the official program guide furnished through the courtesy of the California Conservation Council and a covering letter from the Superintendent of Public Instruction. The program guide offers a number of suggestions for planning a worth-while observation of Conservation Week.

The Department of Education joins with the Department of Natural Resources, the Department of Fish and Game, and the Department of Water Resources in urging not only the observance of Conservation Week, but also the maintenance of conservation instruction throughout the year.

o

printed in CALIFORNIA STATE PRINTING OFFICE

10984 1-60 15M

DIRECTORY OF THE CALIFORNIA STATE DEPARTMENT OF EDUCATION

STATE BOARD OF EDUCATION

	Term Expires January 15
William L. Blair, *President*, Pasadena	1960
Wilber D. Simons, *Vice President*, Redding	1960
Byron H. Atkinson, Los Angeles	1961
Thomas W. Braden, Oceanside	1963
Raymond J. Daba, Atherton	1962
Louis H. Heilbron, San Francisco	1963
Dr. Mabel E. Kinney, Los Angeles	1962
Mrs. Seymour Mathiesen, Fresno	1962
Mrs. Eva C. Noland, Salinas	1960
Thomas L. Pitts, Los Angeles	1961

STAFF

(Unless otherwise indicated, all staff members may be reached at the State Education Building, 721 Capitol Avenue, Sacramento 14)

SUPERINTENDENT OF PUBLIC INSTRUCTION
Roy E. Simpson, *Superintendent of Public Instruction and Director of Education*
Richard P. Hafner, Jr., *Special Assistant to the Director of Education*
Laurence D. Kearney, *Administrative Adviser*
Mrs. Jane Hood, *Assistant to the Superintendent*, 807 State Building, Los Angeles 12
Roger C. Monroe, *Personnel Officer*
William E. Dresser, *Field Representative*
George E. Hogan, *Deputy Superintendent; Chief, Division of Departmental Administration*
Francis W. Doyle, *Deputy Superintendent; Chief, Division of Special Schools and Services*
Samuel W. Patterson, *Assistant Division Chief*
Jay Davis Conner, *Associate Superintendent; Chief, Division of Instruction*
J. Burton Vasche, *Associate Superintendent; Chief, Division of State Colleges and Teacher Education*
Donald R. Youngreen, *Assistant Division Chief*
Wallace W. Hall, *Associate Superintendent; Chief, Division of Public School Administration*
Ronald W. Cox, *Assistant Division Chief*

ADMINISTRATIVE SERVICES, Bureau of, Marion B. Sloss, *Chief*

ADULT EDUCATION, Bureau of, Stanley E. Sworder, *Chief*

AGRICULTURAL EDUCATION, Bureau of, Byron J. McMahon, *Chief*

AUDIO-VISUAL AND SCHOOL LIBRARY EDUCATION, Bureau of, Harry J. Skelly, *Chief*

BLIND, FIELD REHABILITATION SERVICE FOR THE, Bernece McCrary, *Supervising Field Worker*, 515 Van Ness Avenue, San Francisco 2

BUSINESS EDUCATION, Bureau of, R. C. Van Wagenen, *Chief*

COLLEGE FACILITIES PLANNING, Wesley R. Burford, *Specialist*

CREDENTIALS OFFICE, Herschel S. Morgan, *Supervising Credentials Technician*

EDUCATION RESEARCH, Bureau of, Henry W. Magnuson, *Chief*

ELEMENTARY EDUCATION, Bureau of, Helen Heffernan, *Chief*

ELEMENTARY TEXTBOOK DISTRIBUTION, Burriss E. Claypool, *Supervisor*

GUIDANCE, Bureau of, Wm. H. McCreary, *Chief*

HEALTH EDUCATION, PHYSICAL EDUCATION, AND RECREATION, Bureau of, C. Carson Conrad, *Chief*

HIGHER EDUCATION, Arthur D. Browne, *Specialist*

HOMEMAKING EDUCATION, Bureau of, Mrs. Dorothy M. Schnell, *Chief*

INDUSTRIAL EDUCATION, Bureau of, Samuel L. Fick, *Chief*

JUNIOR COLLEGE EDUCATION, Bureau of, Hugh G. Price, *Chief*

LIBRARIES, Division of, Mrs. Carma R. Zimmerman, *State Librarian*, Library and Courts Building

NATIONAL DEFENSE EDUCATION ACT ADMINISTRATION, Bureau of, J. Graham Sullivan, *Chief*

READJUSTMENT EDUCATION, Bureau of, Herbert E. Summers, *Chief*

SCHOOL APPORTIONMENTS AND REPORTS, Bureau of, Ray H. Johnson, *Chief*

SCHOOL DISTRICT ORGANIZATION, Bureau of, Drayton B. Nuttall, *Chief*

SCHOOL LUNCH PROGRAM, James M. Hemphill, *Supervisor*

SCHOOL PLANNING, Bureau of, Charles D. Gibson, *Chief*

SECONDARY EDUCATION, Bureau of, Frank B. Lindsay, *Chief*

SPECIAL EDUCATION, Bureau of, Ernest P. Willenberg, *Chief*

STATE COLLEGE CURRICULA, Jon S. Peters, *Specialist*

SUPPLEMENTAL EDUCATION SERVICES, Donald E. Kitch, *Chief*

SURPLUS PROPERTY, STATE EDUCATIONAL AGENCY FOR, William Farrell, *Chief Surplus Property Officer*

TEACHER EDUCATION, Carl A. Larson, *Specialist*

TEACHER RECRUITMENT, Blair E. Hurd, *Co-ordinator*

TEXTBOOKS AND PUBLICATIONS, Bureau of, Ivan R. Waterman, *Chief*

VOCATIONAL EDUCATION, Wesley P. Smith, *State Director*

VOCATIONAL REHABILITATION SERVICE, Andrew Marrin, *Chief*

CALIFORNIA SCHOOLS

Official publication issued monthly by the California State Department of Education, Sacramento 14, California.

●

Entered as second class matter at the Post Office at Sacramento, California.

●

RETURN POSTAGE GUARANTEED